

ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

May 2, 2005

Paul Supple Atlantic Richfield P.O. Box 6549 Moraga, CA 94549

Subject:

Fuel Leak Case No. RO0000494, ARCO #2111, 1156 Davis Street, San Leandro, California – Workplan Approval & System Start-Up Report Request

Dear Mr. Supple:

Alameda County Environmental Health (ACEH) has reviewed your November 17, 2005, Offsite Well Installation Work Plan prepared by URS Corporation for the above-referenced site. ACEH discussed the site with URS on April 28, 2005 and concurs that additional sampling downgradient of the site is necessary. As verbally agreed, 1) no drilling at the proposed location near Lee's Donuts is necessary at this time, and 2) near Liberty Fitness, a pair of soil borings (for lithologic logging then depth discrete groundwater sampling) are needed instead of the proposed monitoring well. We concur with the workplan as modified above, provided the following conditions are met:

- As required by 23 CCR 2729 and 2729.1, all analytical data, monitoring well locations and top-of-casing elevations will be uploaded to the State Geotracker database. Confirmation will be submitted to ACEH in the report requested below.
- 2. If deemed necessary by your geologist or engineer to fully define the vertical and lateral extent of contamination, additional soil or groundwater samples will be collected as part of the current investigation efforts. ACEH will be informed via telephone or email of any additions to the sampling and analysis plan. Any additional work will follow the workplan-specified procedures. Dynamic investigations are consistent with USEPA protocol for expedited site assessments, which are scientifically valid and offer a cost-effective approach to fully define a plume and to help progress a case toward closure.
- 3. 72-hr advance written notification (email preferred) will be provided to ACEH prior to field sampling activities.

Please implement the proposed investigation and submit technical reports following the schedule below. In addition, we request that you address the following technical comments.

#### **TECHNICAL COMMENTS**

#### 1. DPE System Startup Evaluation

ACEH understands that a multi-phase extraction (MPE) system has been designed and is currently being permitted for operation at the site. As part of your system startup testing and ongoing system optimization efforts please include the following field measurements: a) depth to water in the extraction wells and an appropriate array of monitoring locations; b) vacuum influence in an appropriate array of monitoring locations; c) wellhead and stinger/drop tube vacuum in each extraction well; d) system vacuum and flow rates; e) vapor extraction rate at

appropriate time intervals; f) total volume of liquids extracted; and g) vapor and groundwater concentrations in system influent and at the extraction points (analytical laboratory data is required in addition to field monitoring with a PID). System startup needs to include collection and analysis of vapor and groundwater samples from the system influent and from the extraction wells. Please submit your system start-up results in the report requested below.

#### REPORT REQUEST

Please submit your Soil and Water Investigation and System Start-Up Report by October 31, 2005. ACEH makes this request pursuant to California Health & Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2778 outline the responsibilities of a responsible party for an unauthorized release from an UST system, and require your compliance with this request.

Please call me at (510) 567-6719 with any questions regarding this case.

Sincerely,

Robert W. Schultz, P.G.

Hazardous Materials Specialist

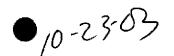
cc: Scott Robinson, URS Corporation, 1333 Broadway, Suite 800, Oakland, CA 94612

Donna Drogos, ACEH

File

AGENCY DAVID J. KEARS, Agency Director





RO0000494

October 22, 2003

Mr. Paul Supple ARCO Products Company P.O. Box 6549 Moraga, CA 94570 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: RAP Approval for ARCO Station 2111 at 1156 Davis St, San Leandro, CA

Dear Mr. Supple:

I have completed review of URS' July 15, 2003 Remedial Action Plan Addendum report prepared for the above referenced site. URS' proposal to advance at least 5 soil borings using Direct Push Technology to delineate the vertical and horizontal extent of the plume is acceptable. Based on information collected from this phase of investigation, the location and screen interval of permanent groundwater monitoring well(s) will be determined.

The RAP addendum should be implemented within 60 days of the date of this letter, or by December 29, 2003. Please provide at least 72 hours advance notice of field activities. If you have any questions, I can be reached at (510) 567-6762 or by email at echu@co.alameda.ca.us.

eva chu

Hazardous Materials Specialist

c:

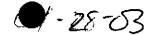
Donna Drogos

email: Scott Robinson, URS

arco2111-2







DAVID J. KEARS, Agency Director

RO0000494

April 25, 2003

Mr. Paul Supple ARCO Products Company P.O. Box 6549 Moraga, CA 94570 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Migration Control at ARCO Station 2111 at 1156 Davis St, San Leandro, CA

Dear Mr. Supple:

Alameda County Environmental Health staff has completed review of the case file for the above referenced site. We are very concerned with the high levels of petroleum hydrocarbons, including benzene and MTBE at and downgradient from your site. In October 2002, a Corrective Action Plan prepared for the site, concluded that natural attenuation would be the most cost-effective approach to remediate the contaminant plume. Presently, groundwater from well MW-2 contains free phase hydrocarbon, and well MW-7 contains 110,000 ppb TPHg, 1,500 ppb benzene, and 120,000 ppb MTBE. The contaminant plume does not appear stable and continues to migrate offsite. The extent of the plume has not been delineated.

This agency does not concur that natural attenuation should be the only remedial alternative for the site. At this time, you must implement migration control to prevent continued creation of a dissolved contaminant plume. It is recommended that dual phase extraction, that was demonstrated in a 78 hour pilot test to be an effective solution in the long term to remediate the site, be used to control migration of BTEX and MTBE. Please outline your proposal for migration control in a Remedial Action Work Plan. The work plan is due within 45 days of the date of this letter, or by June 20, 2003. The work plan should include a proposal to delineate the extent of the plume, too.

If you have any questions, I can be reached at (510) 567-6762 or by email at echu@co.alameda.ca.us.

eva chu

Hazardous Materials Specialist

c: Donna Drogos

arco2111-1

### HEALTH CARE SERVICES

**AGENCY** 

DAVID J. KEARS, Agency Director



10-2-02

R0494

**STID 744** 

September 30, 2002

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Arco Station #2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

As you are aware, this office sent a letter dated June 26<sup>th</sup>, 2002, which required you to submit a workplan to address the high concentrations of the contaminants at the above referenced site, by July 26, 2002. In fact, there are several wells, which indicated high concentrations of contaminants. For instance, MW-5 well revealed significant concentrations of the constituents with up to 10,000ppb, up to 100ppb, and up to 10,000ppb of TPHG, Benzene, and MTBE respectively. In the same correspondence, this office concurred with the work proposed for the next quarter by Mr. Trevor Atkinson of Delta Environmental Consultants, Inc. However, this workplan has not yet been submitted to this office. Nevertheless, I have received a phone call from your consultant regarding the extension of the above workplan submittal to October 7<sup>th</sup>, 2002. This extension is granted. However, a Notice of Violation (NOV) shall be issued, if the required workplan is not submitted to this office by October 6<sup>th</sup>, 2002.

Please call me at (510) 567-6876, if you have any questions.

Sincerely,

Amir K. Gholami, REHS
Hazardous Materials Specialist

C: Mr. Mr. Trevor Atkinson of Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670-6021 Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14<sup>th</sup> Street, San Leandro, CA 94577 Files

DAVID J. KEARS, Agency Director



06-27-02

**STID 744** 

June 26, 2002

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570

**ENVIRONMENTAL HEALTH SERVICES** ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Arco Station #2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I have received and reviewed the "Quarterly Groundwater Monitoring Report, Fourth Quarter 2001 ", dated March 19, 2002, submitted by Mr. Steven Meeks of Delta Environmental Consultants, Inc. regarding the above referenced site. Please note the following:

- 1. The most significant concentration still resides within MW-7 well with MTBE at 72,000ppb by EPA method 8260. You must address the increase in the concentrations of the constituents by providing some possible appropriate active remediation plan.
- 2. MW-1, MW-2, and MW-5 wells also contain significant concentrations of the constituents with MW-5 revealing the highest at up to 10,000ppb, up to 100ppb, and up to 10,000ppb of TPHG, Benzene, and MTBE respectively.
- The concentration of the constituents detected in MW-2 well revealed up to 31,000, 1,500ppb, and 9,300ppb of TPHG, Benzene and MTBE respectively.
- MW-5 well revealed up to 500ppb, up to 5ppb, and 9,400ppb of TPHG, Benzene and MTBE respectively. Some wells indicate an increase in concentrations of some of the constituents while revealing a decrease in the concentration of some others simultaneously.
- 5. Per figure 2 within this document, groundwater flow gradient is mostly to the southwesterly at 0.003 ft/ft. However, the second page of this document indicates a West -Northwesterly direction.

Please submit a plan, to address the high concentrations of the constituent, by July 26, 2002. I concur with the work proposed for the next quarter by Mr. Trevor Atkinson of Delta Environmental Consultants, Inc.

Please call me at (510) 567-6876, if you have any questions.

Sincerely,

Files

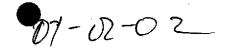
V and a stalmal

Amir K. Gholami, REHS

Hazardous Materials Specialist

C: Mr. Mr. Trevor Atkinson of Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670-6021 Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14<sup>th</sup> Street, San Leandro, CA 94577





20494

**ENVIRONMENTAL HEALTH SERVICES** 

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

**STID 744** 

December 26, 2001

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

This office is in receipt of both "Schedule for Proposed Dual-Phase High Vacuum Pilot Test and Site Groundwater Remediation" and "Request for Approval of 5-Day Dual-Phase High Vacuum Pilot Test" documents, both dated December 21, 2001, submitted by Mr. Steven Meeks of Delta Environmental Consultants, Inc. regarding the above referenced site.

The following issues have been discussed in these documents:

- Per these documents, Delta Environmental is proposing to perform an extended 5-day high vacuum dual phase extraction (DVDPE) test at the site. This test will use a mobile dualphase high vacuum oxidizer, which will be connected to the piping connected to MW-7 and MW-2 wells. The extracted groundwater will be stored and disposed of property, while the extracted soil vapors will be treated by the thermal oxidizer prior to discharge to the atmosphere under approval by Bay Area Air Quality Management District.
- Oxygen Releasing Compounds (ORC) will be used to in MW-1 and MW-5 wells to facilitate natural degradation of dissolved petroleum hydrocarbons in groundwater.
- Monthly liquid phase hydrocarbon verification and bailing will continue in MW-2 and MW-7 wells until the new HVDPE testing has been evaluated.
- The result of this test will be used for potential future remediation system.

If you have any questions, please call me at (510) 567-6876.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Mr. Mr. Trevor Atkinson of Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670-6021 Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14<sup>th</sup> Street, San Leandro, CA 94577 Files



DAVID J. KEARS, Agency Director



10-17-01

20494

**ENVIRONMENTAL HEALTH SERVICES** 

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

#### **STID 744**

October 16, 2001

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I am in receipt of "Sump Sampling Results", dated August 9, 2001, submitted by Mr. Steven Meeks of Delta Environmental Consultants, Inc. regarding the above referenced site. This report was generated during the sump removal and upgrade activities at the above referenced site. I have reviewed this document, discussed it with Mr. Meek, and would like to make the following comments:

Per this report, the soil sample was taken at two feet after removal of the sump. Various heavy metals, BTEX, MTBE, among other pollutants were analyzed for. The concentrations of the constituents were compared to those guidelines found in California Regional Water Quality Control Board San Francisco Bay Region's Table D. However, the soil at this depth below sump did not detect significant concentration of the pollutant per table 1 within this report.

However, monitoring well analysis, per previous report, indicated significant concentrations of pollutants in the groundwater. There was <0.01" thick sheen observed in the MW-2 and MW-7 wells. Additionally, the concentration of chemical constituents in MW-1, MW-2, and MW-5 wells were significant at 257ppb, 64ppb, and 1,080ppb of TPHG, Benzene, and MTBE respectively in MW-1 well. There were 45,900ppb, 1,090ppb, and 22,400ppb of TPHG, Benzene and MTBE respectively in MW-2 well while MW-5 well revealed 72.9ppb, 2.51ppb, and 19,200ppb of TPHG, Benzene and MTBE respectively.

Per my previous correspondence, please submit a plan, to address the increase in the concentrations of constituent as indicated above by November 2, 2001.

If you have any questions, please call me at (510) 567-6876.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Mr. Mr. Trevor Atkinson of Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670-6021 Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14<sup>th</sup> Street, San Leandro, CA 94577 Files

10-4-0/

ROHOY

DAVID J. KEARS, Agency Director

**STID 744** 

October 2, 2001

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 **ENVIRONMENTAL HEALTH SERVICES** 

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Arco Station #2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I have received and reviewed the "Quarterly Groundwater Monitoring Report, Second Quarter 2001", dated September 18, 2001, submitted by Mr. Steven Meeks of Delta Environmental Consultants, Inc. regarding the above referenced site.

I would like to make the following comments concerning this document:

- According to this report, free product was not present in any of the wells. However, the
  most significant concentration was that of MTBE at MW-7 at 170,000ppb by EPA method
  8260. You must address the increase in the concentrations of the constituents by providing
  some possible appropriate active remediation plan.
- The concentration of chemical constituents in MW-1, MW-2, and MW-5 wells are still significant at up to 500ppb, up to 24ppb, and up to 1,200ppb of TPHG, Benzene, and MTBE respectively in MW-1 well.
- MW-2 well revealed up to 10,000ppb, up to 100ppb, and 4,500ppb of TPHG, Benzene and MTBE respectively.
- MW-5 well revealed up to 500ppb, up to 5ppb, and 9,400ppb of TPHG, Benzene and MTBE respectively. Some wells indicate an increase in concentrations of some of the constituents while revealing a decrease in the concentration of some others simultaneously.
- The groundwater flow gradient is mostly to the northwest at 0.004 ft/ft per figure 2.

I concur with the work proposed for the next quarter by Mr. Trevor Atkinson of Delta Environmental Consultants, Inc. Furthermore, please submit a plan, to address the increase in the concentrations of constituent as indicated above, within 30 days or by November 2, 2001.

Should you have any questions and or concerns, please call me at (510) 567-6876.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Mr. Mr. Trevor Atkinson of Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670-6021 Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14<sup>th</sup> Street, San Leandro, CA 94577 Files

AGENCY





04-05-01

20494

ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

**Stid 744** 

April 4, 2001

Mr. Paul Süpple Arco Product Company PO Box 6549 Moraga, CA 94570

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

This office is in receipt the "Quarterly Groundwater Monitoring Report, Fourth Quarter 2000", dated March 27th, 2001, submitted by Mr. Trevor Atkinson of Delta Environmental Consultants, Inc. regarding the above referenced site.

Per this report, free product was not present in MW-2 and MW-7 wells. However, sheen (<0.01" thick) was observed in the same wells.

The concentration of chemical constituents in MW-1, MW-2, and MW-5 wells are still significant at 257ppb, 64ppb, and 1,080ppb of TPHG, Benzene, and MTBE respectively in MW-1 well. MW-2 well revealed 45,900ppb, 1,090ppb, and 22,400ppb of TPHG, Benzene and MTBE respectively. MW-5 well revealed 72.9ppb, 2.51ppb, and 19,200ppb of TPHG, Benzene and MTBE respectively. Sheen was observed in MW-7 well. Some wells indicate an increase in concentrations of some of the constituents while revealing a decrease in the concentration of some others simultaneously.

The remaining wells do not show much change in the concentration of the constituents. The groundwater flow gradient is mostly to the northwest.

I concur with the work proposed for the next quarter by Mr. Mr. Trevor Atkinson of Delta Environmental Consultants, Inc. However, please address the increase in the concentrations of the constituents by providing some possible appropriate active remediation plan.

If you have any questions, please call me at (510) 567-6876.

Sincerely,

Amir K. Gholami, REHS

Hazardous Materials Specialist

C: Mr. Mr. Trevor Atkinson of Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670-6021 Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14th Street, San Leandro, CA 94577 Files

**AGENCY** 

DAVID J. KEARS, Agency Director



ROLL94

**Stid 744** 

January 26, 2001

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I have received "Quarterly Groundwater Monitoring Report, Third Quarter 2000", dated December 20, 2000, submitted by Mr. Trevor Atkinson of Delta Environmental Consultants, Inc. regarding the above referenced site.

According to this report, the concentration of chemicals in MW-1, MW-2, and MW-5 wells are still significant at 290ppb, 76ppb, and 1,500ppb of TPHG, Benzene, and MTBE respectively in MW-1 well. There was a slight reduction of concentration since previous analysis for MW-1 well. Analytical results for MW-2 well revealed 63,000ppb, 12,00ppb, and 19,000ppb of TPHG, Benzene and MTBE respectively. MW-5 well revealed 54ppb, <0.5ppb, and 13,000ppb of TPHG, Benzene and MTBE respectively. MW-7 well, on the other hand, revealed 8,400ppb, 420ppb, and 5,600ppb of TPHG, Benzene and MTBE respectively. There seems to be some oscillation in the concentrations of some of the constituents within some of the wells.

The remaining wells do not show much change in the concentration of the constituents. The groundwater flow gradient is mostly to the northwest.

Please explain why this oscillation is being observed.

I concur with the work proposed for the next quarter by Mr. Mr. Trevor Atkinson of Delta Environmental Consultants, Inc.

I will be looking forward for the next Quarterly Groundwater Monitoring Report.

Should you have any questions and or concern, please call me at (510) 567-6876.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Mr. Mr. Trevor Atkinson of Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670-6021 Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14<sup>th</sup> Street, San Leandro, CA 94577 Files

### ALAMEDA COUNTY

**HEALTH CARE SERVICES** 

AGENCY

DAVID J. KEARS, Agency Director



Ro#494

Stid 744

October 25, 2000

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570

ENVIRONMENTAL HEALTH SERVICES **ENVIRONMENTAL PROTECTION** 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

10-26-00

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

This office is in receipt of a document called "Quarterly Groundwater Monitoring Results" by Mr. Stephen Lofholm of the It Group for first Christian Church located at 1190 Davis Street, San Leandro, California. This sampling analysis was performed in relation to the above referenced site. The MW-5 located at the first Christian Church revealed 92ppb, <0.5ppb, and 7,900ppb of TPHG, Benzene, and MTBE respectively.

As you are aware, MTBE is the only significant contaminant in this well.

I understand this is done as a part of Quarterly Groundwater Monitoring program at the above referenced site.

Please call me at (510) 567-6876 should you have any questions.

Sincerely.

Amir K. Gholami, REHS

Hazardous Materials Specialist

C: Mr. Stephen Lofholm of the It Group, 2201 Broadway, Suite 101, Oakland, CA 94612-3023

Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14th Street, San Leandro, CA 94577

Files

DAVID J. KEARS, Agency Director

Ro#494

Stid 744

October 24, 2000

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250

Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I am in receipt of the Quarterly Groundwater Monitoring Report dated June 9, 2000 submitted by Mr. Stephen Lofholm of It Group. Per this report, the concentration of chemicals in MW-1, MW-2, and MW-5 wells have increased significantly. There were 190ppb, 4.5ppb, and 3,500ppb of TPHG, Benzene, and MTBE respectively in MW-1 well. MW-2 well revealed 1,700ppb, 270ppb, 55,000ppb of TPHG, Benzene and MTBE respectively. MW-5 well revealed 92ppb, <0.5ppb, 7900ppb of TPHG, Benzene respectively. This is a significant increase in the concentration of MTBE in all the mentioned wells. The concentrations for the remaining wells have not changed much since the last quarterly report. There were also some other contaminants present as well.

The groundwater flow gradient is mostly to the northwest.

I concur with the work proposed for the next quarter by Mr. Stephen Lofholm of the It Group.

I will be looking forward for the next Quarterly Groundwater Monitoring Report.

If you have any questions, please call me at (510) 567-6876.

Sincerely,

Amir K. Gholami, REHS

Hazardous Materials Specialist

C: Mr. Stephen Lofholm of the lt Group, 2201 Broadway, Suite 101, Oakland, CA 94612-3023

Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14<sup>th</sup> Street, San Leandro, CA 94577

Files

AGENCY





RO# 494

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

(510) 567-6700

FAX (510) 337-9335

Stid 744

October 12, 2000 Arco Product Company PO Box 6549 Moraga, CA 94570

RE: Arco Station #2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I am in receipt of a document called dated October 3, 2000 regarding the "Destruction of Vapor Extraction Well VW-4 and Proposed Installation of Remediation Piping for Possible Future Use" by Mr. Steven W. Meeks of Delta Environmental in regard to the above referenced site. You may implement this plan to remedy the loss of W-4 well and to facilitate the remediation process. This plan may be implemented during the site upgrade activities to reduce cost.

Furthermore per my previous correspondence the recent quarterly groundwater monitoring had indicated an increase in hydrocarbon impact at the above referenced site; and Mr. VanderVeen of It Group had suggested the use of High Vacuum Extraction to assess this method to provide remedial alternative and interim hydrocarbon removal at the above referenced site.

Additionally per my previous discussion regarding the "High Vacuum Extraction Pilot Test Report" dated May 3, 2000 by the It Group, I concur with the continued monitoring to assess the extent of contamination and the effect of HVE Pilot test as well as using of Vac Truck for interim remediation by quarterly batch extraction from monitoring well MW-2 and MW-7.

Please call me at (510)- 567-6876, should you have any questions.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Messrs.Trevor Atkinson & Steven W. Meeks, Delta Environmental, 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA Mr. Mike Bakaldin, City of San Leandro, Environmental Services Division, 835 East 14<sup>th</sup> Street, San Leandro, CA 94577 Files

**AGENCY** 





ROHAL

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Stid 744

September 27, 2000 Arco Product Company PO Box 6549 Moraga, CA 94570

RE: Arco Station #2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I just received a phone call from your recent consultant, Mr. Trevor Atkinson of Delta Environmental, 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA. Mr. Atkinson indicated that the City of San Leandro will be overseeing a planned excavation of the underground tank(s), during which VE4 well will be taken out since it is located at the where the new tank will be installed. Per Mr. Atkinson, the VE-4 well was never used and is located at cross and up-gradient of the present plume at the above referenced site. However, according to Figure 2 site plan included in High Vacuum Extraction Pilot Test Report dated May 3, 2000 by the It Group, the V-4 well is located down and cross gradient of the plume. Ground water is moving to the west at 0.002 ft/ft. Therefore, I suggest installment of another well to replace the loss of V-4 well presently existing at the site.

Additionally recent quarterly groundwater monitoring had indicated an increase in hydrocarbon impact at the above referenced site. Therefore, Mr. VanderVeen of It Group had suggested the use of High Vacuum Extraction to assess this method to provide remedial alternative and interim hydrocarbon removal at the above referenced site.

Furthermore, I have received and reviewed the "High Vacuum Extraction Pilot Test Report" dated May 3, 2000 by the It Group. I concur with this report regarding the continued monitoring to assess the extent of contamination and the effect of HVE Pilot test as well as using of Vac Truck for interim remediation by quarterly batch extraction from monitoring well MW-2 and MW-7.

If you have any questions, please call me at (510)- 567-6876.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Trevor Atkinson, Delta Environmental, 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA Files





Including ec's

RO494

ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway Alameda, CA 94502-6577 (510) 567-6700 (510) 337-9432

Stid 744

January 24, 2000 Arco Product Company PO Box 6549 Moraga, CA 94570

RE: Arco Station #2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I am in receipt of "High Vacuum Extraction Pilot Test, (HVE TEST)" dated November 2, 1999 submitted by Mr. Glen VanderVeen of Pinnacle Environmental Services Inc. I apologize for the delay in response to this document.

I understand that recent quarterly groundwater monitoring has indicated an increase in hydrocarbon impact at the above referenced site. Therefore, Mr. VanderVeen has suggested the use of High Vacuum Extraction to assess this method to provide remedial alternative and interim hydrocarbon removal at the above referenced site.

Per this report, the HVE Test was to be performed after the last quarterly monitoring on November 1999 having met other regulatory agencies such as the Bay Area Air Quality District.

I would like to ascertain whether this test has actually been performed. If this test has been performed please send a copy of a report to present the findings of this activity to this office including the assessment of hydrocarbon impact, the total hydrocarbon mass removed, and recommendation for further work regarding the above referenced site.

I will be looking forward for the HVE Pilot Test report.

Should you have any questions, please do not hesitate to call me at (510)- 567-6876.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Glen VanderVeen, Pinnacle Environmental Services, 144-A Mayhew Way, Walnut Creek, CA 94596 Files

ARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director

Sent 12/9/99 Including cc's

R0494

ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway Alameda, CA 94502-6577 (510) 567-6700 (510) 337-9432

Stid 744

December 9, 1999

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

This office is in receipt of the Quarterly Groundwater Monitoring Report regarding the third quarter 1999 submitted by Glen VanderVeen of Pinnacle Environmental Services Inc. According to this report, high concentrations of plum constituent still exists on this site. For example, MW-2 well, has revealed up 92,000ppb, 2,200ppb, and 11,000ppb of TPHG, Benzene, and MTBE respectively.

Per this report, MTBE concentration has increased to 6,700ppb and 62,000ppb in MW-5 and MW-7 wells respectively.

There are, of course, other fluctuations among other constituents as well.

I will be looking forward for the 4th quarterly groundwater report.

If you have any questions, please call me at (510)- 567-6876.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Glen VanderVeen, Pinnacle Environmental Services, 144-A Mayhew Way, Walnut Creek, CA 94596 Files







10-15 99

Stid 744

October 14, 1999

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570

**ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION** 1131 Harbor-Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I am in receipt of the Quarterly Groundwater Monitoring Report regarding the second quarter 1999 submitted by Glen VanderVeen of Pinnacle Environmental Services Inc. According to this report the concentrations of all the constituents in the plume are generally high. There are, of course, some fluctuations among some constituents as well.

The wells of concern are MW-2, MW-1, MW-5, and MW-3 wells respectively. As you know these wells have had higher concentrations of plum constituents. MW-2 well, for instance, has revealed up 120,000ppb, 6,900ppb, and 17,000ppb of TPHG, Benzene, and MTBE respectively.

The test for the presence of other oxygenated contaminants such as those of TAME, DIPE, ETBE, TBA, EDB, and EDC revealed some high concentrations of the above within the samples. For instance the MW-7 well indicates up to <50,000ppb of TBA. I would like to remind you of having proper detection limits set during all your laboratory analysis. We have had discussions on this issue in the past.

MTBE Concentration was also tested using EPA Method 8260 to rule out the possibility of false positive.

I will be looking forward for the 3rd quarterly groundwater report.

Should you have any questions, please call me at (510)- 567-6876.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Glen VanderVeen, Pinnacle Environmental Services, 144-A Mayhew Way, Walnut Creek, CA 94596 Files

#### **HEALTH CARE SERVICES**

AGENCY



DAVID J. KEARS, Agency Director

ROAPH

Stid 744

September 21, 1999

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 **ENVIRONMENTAL HEALTH SERVICES** 

1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 (510) 337-9335 (FAX)

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I just received a phone call from Mr. Glen VanderVeen of Pinnacle Environmental Services who raised a few issues regarding my letter dated September 14<sup>th</sup>, 1999. In that letter, I expressed concerns for some issues, which had not been previously addressed. These included the following items:

- 1. Choosing proper detection limits for TPH constituent for laboratory analysis.
- 2. Performance of EPA method 8260 to rule out false positive for MTBE.
- 3. Testing for other oxygenated contaminants such as TAME, DIPE, ETBE, TBA, EDB, and EDC.

Per my discussion with Mr. VanderVeen, EPA method 8260 and other oxygenates tests have been addressed and will be included in the next quarterly groundwater monitoring report.

In regard to TPH concentration, we discussed the need to have some objective values on an occasional basis rather than merely less than non-detect "<ND". This will help to make a better assessment of the overall status of the plume, as to whether it is stable, decreasing, and or increasing. However, I do concur with Mr. VanderVeen regarding the constituents MTBE and Benzene, which are definitely more significant constituents than TPH.

I will be looking forward for the next Quarterly Groundwater Monitoring Report.

If you have any questions, please call me at (510) 567-6876.

Sincerely.

Amir K. Gholami, REHS

Hazardous Materials Specialist

C: Glen VanderVeen, Pinnacle Environmental Services, 144-A Mayhew Way, Walnut Creek, CA 94596 Files

### HEALTH CARE SERVICES

**AGENCY** 



DAVID J. KEARS, Agency Director

RO 494

Stid 744

September 14, 1999

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 **ENVIRONMENTAL HEALTH SERVICES** 

1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 (510) 337-9335 (FAX)

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

This office is in receipt of the Quarterly Groundwater Monitoring Report dated June 22, 1999 submitted by Pinnacle Environmental Solutions. According to this report, the concentration of chemicals in MW-1 and MW-2 wells have increased significantly. There were 20,000ppb, 580ppb, and 14000ppb of TPHG, Benzene, and MTBE respectively in MW-1 well, which indicated a significant increase. MW-2 well revealed 160,000ppb, 3000ppb, 24,000ppb, 4,400ppb, 31,000ppb, and 23,000ppb of TPHG, BTEX, and MTBE respectively. This is also a significant increase compared to the previous concentration values.

However, the concentrations for the remaining wells have not changed much since the last quarterly report. There were also some other contaminants present as well.

Please be aware, that this office has requested for proper detection limits as well as other issues raised through several previous letters. This includes the performance of EPA method 8260 to rule out false positive for MTBE, and testing for other oxygenated contaminants such as TAME, DIPE, ETBE, TBA, EDB, and EDC.

I will be looking forward for the next Quarterly Groundwater Monitoring Report.

Additionally, Kevin Tinsley, no longer works at this office.

Should you have any questions, please call me at (510) 567-6876.

Sincerely,

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Glen VanderVeen, Pinnacle Environmental Services, 144-A Mayhew Way, Walnut Creek, CA 94596 Files

#### ALAMEDA COUNTY

#### **HEALTH CARE SERVICES**

#### **AGENCY**



DAVID J. KEARS, Agency Director

R0494

Stid 744

July 30, 1999

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 **ENVIRONMENTAL HEALTH SERVICES** 

1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 (510) 337-9335 (FAX)

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

#### LANDOWNER NOTIFICATION AND PARTICIPATION REQUIREMENTS

#### Dear Mr. Supple:

This letter is to inform you of new legislative requirements pertaining to cleanup and closure of sites where an unauthorized release of hazardous substance, including petroleum, has occurred from an underground storage tank (UST). Section 25297.15(a) of Ch. 6.7 of the Health & Safety Code requires the primary or active responsible party to notify all current record owners of fee title to the site of: 1) a site cleanup proposal, 2) a site closure proposal, 3) a local agency intention to make a determination that no further action is required, and 4) a local agency intention to issue a closure letter. Section 25297.15(b) requires the local agency to take all reasonable steps to accommodate responsible landowners' participation in the cleanup or site closure process and to consider their input and recommendations.

For purposes of implementing these sections, you have been identified as the primary or active responsible party. Please provide to this agency, within twenty (20) calendar days of receipt of this notice, a complete mailing list of all current record owners of fee title to the site. You may use the enclosed "list of landowners" form (sample letter 2) as a template to comply with this requirement. If the list of current record owners of fee title to the site changes, you must notify the local agency of the change within 20 calendar days from when you are notified of the change.

If you are the sole landowner, please indicate that on the landowner list form. The following notice requirements do not apply to responsible parties who are the sole landowner for the site.





DAVID J. KEARS, Agency Director

P0494

#### **ENVIRONMENTAL HEALTH SERVICES**

1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 (510) 337-9335 (FAX)

StID 1163

May 17, 1999

Mr. Dave DeWitt Tosco P.O. Box 5155 San Ramon, CA 94583

RE:

Workplan Approval for 76 Service Station 1156 at 4276 MacArthur

Boulevard, Oakland, CA

Dear Mr. DeWitt:

I have completed review of ERI's May 1999 Work Plan for Evaluation of Soil and Groundwater prepared for the above referenced site. The proposal to install four groundwater monitoring wells to evaluate the extent and severity of soil and groundwater contamination at the site is acceptable.

Field work should commence within 60 days of the date of this letter. Please notify me at least 72 hours prior to the start of field activities.

If you have any questions, I can be reached at (510) 567-6762.

eva chu

Hazardous Materials Specialist

c:

Glenn Matteucci

ERI

73 Digital Drive, Suite 100 Novato, CA 94949-5791 AGENCY DAVID J. KEARS, Agency Director



RO#494

Stid 744

March 22, 1999

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION (LOP) 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I am in receipt of the Quarterly Groundwater Monitoring Report dated March 8, 1999 submitted by Pinnacle Environmental Solutions. This report indicates that the concentration of chemicals in all monitoring wells have diminished except MW-2, MW-5, and MW-7 wells which contain <18ppb, <2.5ppb, 54ppb of Benzene, and 1100ppb, 300ppb, 3000ppb of MTBE respectively for the indicated wells. However, the concentrations for the above constituents in their respective well have also diminished since the last quarterly report submitted in December of 1998. There are some other contaminants present as well.

Please ensure that proper detection limits are used for all the constituents and address the previous issues indicated in my last correspondence as well. The issues previously addressed included performing of EPA method 8260 to rule out false positive for MTBE, and testing for other oxygenated contaminants such as TAME, DIPE, ETBE, TBA, EDB, and EDC at least once.

I will be looking forward for the next Quarterly Groundwater Monitoring Report.

If you have any questions, please call me at (510) 567-6876.

Since	relv.
VII 100	1 VI T .

Amir K. Gholami, REHS Hazardous Materials Specialist

C: Glen VanderVeen, Pinnacle Environmental Services, 144-A Mayhew Way, Walnut Creek, CA 94596 Files

AGENCY



DAVID J. KEARS, Agency Director

Ro# 494

**Stid 744** 

February 8, 1999

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION (LOP) 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Arco Station #2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I have received and reviewed the Quarterly Groundwater Monitoring Report dated December 30<sup>th</sup>, 1998 submitted by Pinnacle Environmental Solutions. This report indicates that the concentration of chemicals in all monitoring wells have diminished except MW-2, MW-5, and MW-7 wells which contain <25ppb, <5ppb, 180ppb of Benzene, and 1500ppb, 570ppb, 4200ppb of MTBE respectively for the indicated wells. There are some other contaminants present as well. Please ensure proper detection limits are used for all the constituents and address the following issues as well:

- 1. Make certain that the MTBE level indicated by the lab analysis is not a false positive by performing <u>\*EPA method 8260</u>\*.
- 2. According to Cal /EPA's guidelines and Chuck Headlee of Regional Water Quality Control Board (RWQCB) you need to test for the presence of other oxygenated contaminants such as those of TAME, DIPE, ETBE, TBA, EDB, and EDC at least once to ensure absence of the Indicated constituents.

This is a formal request for technical information and hence any delays should be requested in writing.

If you have any questions, please call me at (510) 567-6876.

Sincerely.

Amir K. Gholami, REHS

Hazardous Materials Specialist

C: Glen VanderVeen, Pinnacle Environmental Services, 144-A Mayhew Way, Walnut Creek, CA 94596 Files

**AGENCY** 



DAVID J. KEARS, Agency Director

RO # 494

Stid 744

February 8, 1999

Mr. Paul Supple Arco Product Company PO Box 6549 Moraga, CA 94570 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION (LOP) 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Arco Station # 2111 located at 1156 Davis Street, San Leandro, CA

Dear Mr. Supple:

I have received and reviewed the Quarterly Groundwater Monitoring Report dated December 30<sup>th</sup>, 1998 submitted by Pinnacle Environmental Solutions. This report indicates that the concentration of chemicals in all monitoring wells have diminished except MW-2, MW-5, and MW-7 wells which contain <25ppb, <5ppb, 180ppb of Benzene, and 1500ppb, 570ppb, 4200ppb of MTBE respectively for the indicated wells. There are some other contaminants present as well. Please ensure proper detection limits are used for all the constituents and address the following issues as well:

- 1. Make certain that the MTBE level indicated by the lab analysis is not a false positive by performing <u>"EPA method 8260"</u>.
- 2. According to Cal /EPA's guidelines and Chuck Headlee of Regional Water Quality Control Board (RWQCB) you need to test for the presence of other oxygenated contaminants such as those of TAME, DIPE, ETBE, TBA, EDB, and EDC at least once to ensure absence of the indicated constituents.

This is a formal request for technical information and hence any delays should be requested in writing.

If you have any questions, please call me at (510) 567-6876.

Sincerely,

Amir K. Gholami, REHS

Hazardous Materials Specialist

C: Glen VanderVeen, Pinnacle Environmental Services, 144-A Mayhew Way, Walnut Creek, CA 94596 Files

**AGENCY** 



DAVID J. KEARS, Agency Director

Ro#494

**STID 744** 

October 7, 1996

Mr. Paul Supple ARCO Products Company 2155 South Bascom Avenue, Suite 202 Campbell, CA 95008 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION (LOP) 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE:

ARCO STATION #2111, 1156 DAVIS STREET, SAN LEANDRO

Dear Mr. Whelan:

I have completed review of the case file for the above referenced San Leandro site up to and including the EMCON "Soil and Groundwater Assessment Report" dated September 19, 1996.

Please be advised that this office is currently in the process of reviewing the EMCON ASTM RBCA Tier 2 Risk Assessment for the above referenced site. Please allow this office 3 to 4 weeks to review this document.

At this time please continue to adhere to a quarterly schedule of well sampling, monitoring, and report submittal as referenced in Title 23, California Code of Regulations (CCR) section 2652(d). Sample analytes shall continue to be total petroleum hydrocarbons as gasoline (TPHg), MTBE and the aromatic hydrocarbons benzene, toluene, ethyl benzene and total xylene isomers (BTEX).

After review of the third quarter 1996 groundwater monitoring results, this site will be reevaluated to determine whether a revised semi-annual groundwater sampling schedule is warranted for this site.

Please feel free to contact me directly at (510)567-6880, with any questions or comments concerning this site.

Sincerely,

Dale Klettke, CHMM

Hazardous Materials Specialist

John Young, EMCON, 1921 Ringwood Avenue, San Jose CA 95131 Mike Bakaldin, San Leandro Hazardous Materials Program Tom Peacock--files

0744rbca\_dkt

BL

**AGENCY** 



120494

DAVID J. KEARS, Agency Director

**STID 744** 

July 11, 1996

Mr. Michael Whelan ARCO Products Company 2155 South Bascom Avenue, Suite 202 Campbell, CA 95008 Alameda County Environmental Health 1131 Harbor Bay Pkwy., #250 Alameda CA 94502-6577 (510)567-6700 FAX(510)337-9335

RE: ARCO STATION #2111, 1156 DAVIS STREET, SAN LEANDRO

Dear Mr. Whelan:

I have completed review of the case file for the above referenced San Leandro site up to and including the EMCON "First Quarter 1996 Groundwater Monitoring Program Results" report dated June 3, 1996.

As documented in the June 3, 1996 EMCON report, laboratory analysis of the groundwater samples collected from monitoring wells MW-2 and MW-7 have detected elevated levels of total petroleum hydrocarbons as gasoline (TPHg), methyl-tert-butyl ether (MTBE) and benzene, toluene, ethyl benzene and total xylene isomers (BTEX). The groundwater sample collected from monitoring well MW-2 on 3/21/96 detected 9,600 ppb-TPHg, 250 ppb-MTBE, 850 ppb-benzene, 30 ppb-toluene, 280 ppb-ethyl benzene and 1400 ppb-total xylenes. The groundwater sample collected from monitoring well MW-7 on 3/21/96 detected 32,000 ppb-TPHg, 280 ppb-MTBE, 870 ppb-benzene, 450 ppb-toluene, 970 ppb-ethyl benzene and 4900 ppb-total xylenes.

This groundwater data was analyzed using a limited ASTM Risk-Based Corrective Action (RBCA) Tier 1 Risk Based Screening Level (RBSL) evaluation as referenced in the ASTM E 1739 - 95 document "Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites". The ASTM E 1739 - 95 document is a consistent decision-making process for the assessment and response to a petroleum release, and is based on the protection of human health and the environment. The Tier I risk assessment compares the chemicals of concern (COCs) documented at the site with Tier 1 RBSLs as presented in the published Look-up Table (ASTM E 1739-95 - Table X2.1 "Example Tier 1 Risk-Based Screening Level (RBSL) Look-up Table). Note: Hazard Quotients (HQ) are used in the development of RBSLs for non-carcinogenic compounds only (examples: toluene, ethyl benzene, total xylenes, etc.), and are not used in determining RSBLs for carcinogens such as benzene.

This evaluation determined that for the following risk exposure scenarios, contaminant levels exceed the CA-modified Tier 1 RSBLs:

- "Groundwater-Vapor Intrusion from Groundwater to Buildings" at a target level (cancer risk) of 1E-04 (1 in 10,000) for a residential receptor scenario.
- "Groundwater-Vapor Intrusion from Groundwater to Buildings" at a target level of 1E-05 (1 in 100,000) for a commercial/industrial receptor scenario.

Mr. Michael Whelan

RE: 1156 Davis Street, San Leandro, CA

July 11, 1996 Page 2 of 2

For your information, the following guidance is referenced in sections 6.7.1 of the ASTM E1739 - 95 document:

"6.7.1 If the concentrations of the chemical(s) of concern exceed the target levels at the point(s) of compliance, then either remedial action, interim remedial action, or further tier evaluation should be conducted".

Remedial action, interim remedial action, and further tier evaluation are further described in sections 6.7.1.1, 6.7.1.2 and 6.7.1.3, respectively. If further tier evaluation is warranted, additional site assessment information may be collected to develop defensible Tier 2 site-specific target levels (SSTLs).

Further tier evaluation is warranted when:

- (1) The basis for the RBSL values (for example, geology exposure parameters, point(s) of exposure, and so forth) are not representative of the site-specific conditions; or
- (2) The SSTL developed under further tier evaluation will be significantly different from the Tier 1 RSBL or will significantly modify the remedial action activities; or
- (3) Cost of remedial action to RBSLs will likely be greater than further tier evaluation and subsequent remedial action.

Therefore, please have your consultant prepare a report which evaluates whether remedial action, interim remedial action, or further tier evaluation is warranted for your site. Please include a cost/benefit analysis for each action evaluated. This report is due within 60 days of the date of this letter, or no later than September 11, 1996.

Should you have any questions or comments, please feel free to call me directly at (510)567-6880.

Sincerely,

Dale Klettke, CHMM

Hazardous Materials Specialist

John Young, EMCON, 1921 Ringwood Avenue, San Jose CA 95131
 Mike Bakaldin, San Leandro Hazardous Materials Program
 Thomas Peacock, Supervising Hazardous Materials Specialist--files

0744tier.2kt



DAVID J. KEARS, Agency Director



**STID 744** 

November 21, 1995

DEPARTMENT OF ENVIRONMENTAL HEALTH 1131 Harbor Bay Parkway Alameda, CA 94502-6577 (510) 567-6777

Mr. Michael Whelan ARCO Products Company 2155 South Bascom Avenue, Suite 202 Campbell, CA 95008

RE: ARCO STATION #2111, 1156 DAVIS STREET, SAN LEANDRO

Dear Mr. Whelan:

I have completed review of the case file for the above referenced San Leandro site up to and including the EMCON "Site Characterization" report dated November 8, 1995.

As documented in the November 8, 1995 EMCON report, laboratory analysis of the groundwater samples collected from monitoring well MW2 have detected elevated levels of total petroleum hydrocarbons as gasoline (TPHg) and BTEX. The groundwater sample collected from monitoring well MW-2 detected 23,000 ppb-TPHg, 1300 ppb-benzene, 310 ppb-toluene, 500 ppb-ethyl benzene and 3500 ppb-total xylenes.

At this time please adhere to a quarterly schedule of well sampling, monitoring, and report submittal as referenced in Title 23, California Code of Regulations (CCR) section 2652(d). Sample analytes shall continue to be total petroleum hydrocarbons as gasoline (TPHg), MTBE and the aromatic hydrocarbons benzene, toluene, ethyl benzene and total xylene isomers (BTEX).

It is my understanding that you are ready to proceed with Phase B of the work plan, which involves the installation of on-site/off-site groundwater monitoring, air-sparging and vapor extraction wells. Please notify this office in advance of any scheduled field work.

Please feel free to contact me directly at (510)567-6880, with any questions or comments concerning this site.

Sincerely,

Dale Klettke, CHMM

Hazardous Materials Specialist

John Young, EMCON, 1921 Ringwood Avenue, San Jose CA 95131

Mike Bakaldin, San Leandro Hazardous Materials Program

Tom Peacock--files

0744smp.dkt

RAFAT A. SHAHID, Director



July 17, 1995

DEPARTMENT OF ENVIRONMENTAL HEALTH Environmental Protection Division 1131 Harbor Bay Parkway, #250 Alameda, CA 94502-6577 (510) 567-6700

STID 744

Mr. Michael Whelan ARCO Products Company 2155 South Bascom Avenue, Ste. 202 Campbell, CA 95008

RE: ARCO STATION #2111, 1156 DAVIS STREET, SAN LEANDRO

Dear Mr. Whelan:

I have completed review of the June 19, 1995 EMCON work plan for the initial and subsequent "phased" installation of ground water monitoring wells at the referenced site. The initial (Phase A) work is primarily focused on an investigation of an apparent release from a former waste oil UST, and includes the installation of four (4) wells at the site. Additional work (i.e., Phase B) will continue if the results of Phase A indicate the presence of fuel compounds in sampled ground water.

During a July 10, 1995 conversation with EMCON's John Young, we discussed the work plan's scope and well placement criteria, among other topics. On the basis of that conversation and our receipt of the July 13, 1995 letter addendum to the subject work plan, the June 9, 1995 EMCON work plan has been accepted.

Please contact the undersigned (510/567-6783) or Mr. Dale Klettke of this office (510/567-6880), the new case handler for this project, when field work is scheduled to begin.

Sincerely,

Scott O. Seery, CHMM

Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Agency Director
Gil Jensen Alameda County Distri

Gil Jensen, Alameda County District Attorney's Office Mike Bakaldin, San Leandro Hazardous Materials Program

Dale Klettke, ACDEH John Young, EMCON

AGENCY DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

CC4580 ALAMEDA COUNTY DEPT. OF ENVIRONMENTAL HEALTH ENVIRONMENTAL PROTECTION DIVISION 1131 HARBOR BAY PKWY., #250 ALAMEDA CA 94502-6577

STID 744

December 29, 1994

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

ARCO STATION #2111, 1156 DAVIS STREET, SAN LEANDRO RE:

Dear Mr. Whelan:

I have completed review of the September 27, 1994 GeoStrategies, Inc. (GSI) report documenting the results of the August 1994 waste oil underground storage tank (UST) removal, and associated pit over-excavation and sampling. This report confirms that a release from the subject waste oil UST has clearly occurred at this site.

The September 1994 GSI UST closure report is the only technical document in the case file for this site. Reference is made in this report of a previous environmental investigation documented in the March 31, 1994 GSI Report of Initial Subsurface Investigation. In order to assist this office in providing informed technical oversight of this case, please submit a copy of the March 1994 GSI report, and any others which we have yet to receive, within the next 30 days.

Please call me at 510/567-6783 should there be any questions.

Sincerely,

\$e/ery, CHMM

enibr Habardous Materials Specialist

Rafat A. Shahid, Agency Director cc: Gil Jensen, Alameda County District Attorney's Office Mike Bakaldin, San Leandro Fire Department

DAVID J. KEARS, Agency Director

AGENCY

RAFAT A. SHAHID, Assistant Agency Director

**STID 744** 

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

September 16, 1994

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

ARCO STATION #2111, 1156 DAVIS STREET, SAN LEANDRO RE:

Dear Mr. Whelan:

Local agency oversight responsibility for the pending environmental investigation at the referenced site has been delegated to Alameda County from the city of San Leandro. may have already received the Notice of Requirement to Reimburse issued September 9, 1994, a requirement of the State Water Resources Control Board's (SWRCB) contract with the county, a Local Oversight Program agency.

Please forward all environmental reports issued to date, as well as those to be issued in the future, for this site, particularly the pending report documenting the recent waste oil tank closure.

Please call me at 510/567-6783 should you have any questions.

Sincerely

Scott O. Seery, CHMM

ညှစ်ကျုံဝr Hazardous Materials Specialist

Rafat A. Shahid, Director, Environmental Services CC: Gil Jensen, Alameda County District Attorney's Office Mike Bakaldin, San Leandro Fire Department