

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



*Sent 1/6/00  
Including cc's*

R0782

January 6, 2000

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

Mr. Kyle Christie  
ARCO Products Company  
4 Centerpointe Drive  
La Palma, California 90623-1066

**Subject: Soil sampling activities at ARCO #2152, 22141 Center Street, Castro Valley, CA 94546**

Dear Mr. Christie:

This office is in receipt of the December 8, 1999 report prepared by Delta Environmental Consultants Inc., detailing the activities surrounding the replacement of piping and installation of dispenser containment at the subject site. The report has been reviewed and it is the opinion of this office that no further investigation is warranted at the site.

This opinion is based upon the available information and with the provision that the information provided to this Agency was accurate and representative of site conditions.

Please contact me at (510)567-6781 should you have any questions regarding this matter.

Sincerely,

Robert Weston  
Sr. Hazardous Materials Specialist

c: Tom Peacock, ACDEH

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

RO# 782

Alameda County CC458C  
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

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, Assistant Agency Director

R0782

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

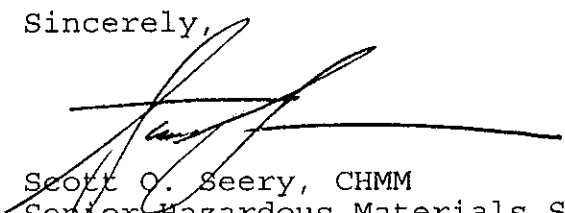
RE: ARCO SERVICE STATION #2152, 22141 CENTER STREET, CASTRO  
VALLEY

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.

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



R0782

RAFAT A. SHAHID, Assistant Agency Director

STID 3943

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

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.

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0702

RAFAT A. SHAHID, Assistant Agency Director

July 23, 1992

Ms. Judy L. Mason  
Arco Products Company  
17315 Studbaker Road  
Cerritos, California 90702-6411

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

**Re: Five year underground Storage Tank Permit  
Arco Facility # 2152, 22141 Center Street, Castro  
Valley, 94546.**

Dear Ms. Mason:

This letter is in regard to inspection Amir Gholami of our office made on July 23, 1992 of the above facility. This inspection was performed with regard to five year underground tank permit. Enclosed please find a five year permit to operate your tanks. However please be advised that Title 23, California Code of Regulations (CCR) requires the following:

- 1) The owner or operator shall comply with the reporting and recording requirements for unauthorized releases, specified in Article 5.
- 2) Written records of all monitoring and maintenance performed shall be maintained for a period of at least three years. These records must be made available upon request, within 36 hours, to a representative of this office.

Consult Title 23, CCR for additional requirements. To obtain a copy of the regulations, you can contact the State Water Resources Control Board at (916)-739-4436.

If you have any questions, please contact Mr. Gholami at (510)-271-4320.

Sincerely,

A handwritten signature in black ink, appearing to read "Ravi Arulanantham", with a long horizontal flourish extending to the right.

Ravi Arulanantham  
Senior Hazardous Materials Specialist

CC: Rafat A. Shahid, Assistant Agency Director, Alameda County  
Environmental Health Department  
Files

USTPERMIT

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0782

RAFAT A. SHAHID, Assistant Agency Director

April 28, 1992

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

Ms. Nancy Walker  
Arco  
22141 Center St.  
Castro Valley, Ca 94546

**Re: FIVE-YEAR PERMITS FOR OPERATION OF THREE  
UNDERGROUND STORAGE TANKS (UST'S) AT 22141  
CENTER ST. CASTRO VALLEY**

According to our records the above mentioned facility has not received a five-year permit to operate UST's. Please complete the following items marked below and return them to me within 30 days. The example plans enclosed, should be used only as guidelines and may not meet your requirements under Title 23.

- 1. Complete UST PERMIT FORM A-one per facility. (enclosed)
- 2. Complete UST PERMIT FORM B-one per tank. (enclosed)
- 3. Complete UST PERMIT FORM C-one per tank if information is available. (enclosed)
- 4. A written tank monitoring plan. (enclosed)
- 5. Results of precision tank test(s) (initial and annual).
- 6. Results of precision pipeline leak detector tests (initial and annual).
- 7. An accurate and complete plot plan. (enclosed)
- 8. A written spill response plan. (enclosed)

**Title 23 of the California Code of Regulation prohibits the operation of ANY UST without a permit.** Please feel free to contact Amir K. Gholami at (510) 271-4320, if you have any questions which may arise in completing the mandatory five-year permit process.

Sincerely,

Ravi Arulanantham  
Senior Hazardous Materials Specialist  
(5YR)

cc: Gil Jensen, Alameda County District Attorney  
Rafat Shahid, Assistant Agency Director, Alameda  
County Department of Environmental Health  
Danielle Stefani, Hazardous Materials Specialist, City of  
Livermore Fire Department

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0782

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.

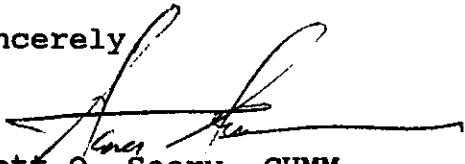
Mr. Chuck Carmel  
RE: ARCO #2152, 22141 Center Street, Castro Valley  
January 30, 1992  
Page 4 of 4

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

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



R0782

November 21, 1991

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

Mr. Gary Gilbert  
Riedel Environmental Services, Inc.  
4138 Lakeside Drive  
Richmond, CA 95814

RE: CASTRO VALLEY SITE SEARCH: ARCO STATION, 22141 CENTER STREET

Dear Mr. Gilbert:

It was a pleasure to meet with you and Mr. Jensen today to review the status of the referenced Castro Valley site. As we discussed, you will be billed for this service at the rate of \$67 per hour and \$1.00 for each page copied. Please find attached a copy of the invoice sent to our Billing Unit.

The site information provided during this meeting was limited to that information available to this Department as of this date, and does not necessarily reflect information which may be available to other agencies or parties involved with the referenced site.

Should you have any additional questions, 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  
files

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0782

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 ( $k < 10^{-4}$  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.

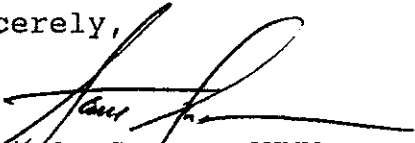
Mr. Charles Carmel  
RE: Arco #2152, 22141 Center St., Castro Valley  
September 4, 1991  
Page 3 of 3

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

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0782

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



R0782

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

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Director



R0782

Telephone Number: (415)

January 31, 1990

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

RE: DEPOSIT/REFUND ACCOUNT; ARCO SERVICE STATION #2152, 22141  
CENTER STREET, CASTRO VALLEY

Dear Mr. Welge:

Please find below the present status of the two current deposit/refund accounts for underground storage tank removals and installations at the referenced site. This information is provided following its request by Mr. Steve Bittman of Applied GeoSystems on behalf of Arco Products Company.

| <u>Activity</u> | <u>Deposit</u> | <u>Date</u> | <u>Acc. No.</u> | <u>*Current Balance*</u> |
|-----------------|----------------|-------------|-----------------|--------------------------|
| Closure         | \$831          | 4-25-89     | U542-313        | \$170                    |
|                 | \$165          | 6-7-89      | U542-358        |                          |
| Installation    | \$663          | 4-25-89     | U542-314        | \$14.33                  |

The additional \$165 remitted June 7, deposited under account U542-358, supplements the initial \$831 deposit of April 25, account U542-313. This supplement was requested when it was discovered that five (5) tanks, rather than four (4) as originally reported, were to be removed. The \$165, in essence, is the difference in deposit between that required for the removal of four tanks (\$831) versus five (\$996).

Because each aspect of this project is catalogued separately with its own deposit/refund account, a deposit of \$831 is still required for site assessment/remediation oversight by the County, as was indicated in previous correspondence. Any balances which remain in these accounts following completion of each phase of work at this site will be refunded.

Mr. Steve Welge  
RE: 22141 Center Street  
January 31, 1990  
Page 2 of 2

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

Sincerely,



Scott O. Seery  
Hazardous Material Specialist

SOS:tlh

cc: Rafat Shahid, Assistant Agency Director, Alameda County  
Department of Environmental Health  
Steve Bittman, Applied GeoSystems  
Files

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



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R0782

Certified Mailer #P 833 981 262

December 26, 1989

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
80 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 38000 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  
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ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0782

June 21, 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 INSTALLATION PLANS, ARCO #2152, 22141 CENTER ST.,  
CASTRO VALLEY

Dear Mr. Welge:

Our office has completed a review of the tank replacement/  
installation plans as submitted by Robert H. Lee & Associates, Inc.  
under cover dated April 24, 1989. The following list of items must  
be addressed through the resubmittal of plans amended to include  
the requested additional information or clarifications. Upon  
receipt and satisfactory review of the amended plans, this  
department will issue its approval for the installation of the  
tanks at the referenced site.

1) Sheet 3 - Item 29

The proposed 5-gallon overflow catchment basins are inadequate. These basins must be capable of containing a minimum of 15-gallons each.

2) Sheets 4 and 4(a)

Discuss the purpose and implementation of the "inactive tank siphon" between the regular and unleaded tanks.

3) Sheet 5 - Item 10

Indicate how the secondary tank is "individually vented" as required by Xerxes. Update drawings accordingly.

Also, provide manufacturer's specifications for the proposed tank, including applicable UL and/or ASME listing, product compatibilities, materials of construction, etc.

4) Sheet 6 - Item 2

Provide protocol for testing the tank annulus before installation.

Mr. Steve Welge  
RE: Arco #2152  
22141 Center St.  
Castro Valley  
June 21, 1989  
Page 2 of 2

5. Sheet 7 - Item 1

Materials

Identify the manufacturer(s) of the primary piping and supply manufacturer's specifications, including UL and/or ASME listing and product compatibilities.

Testing

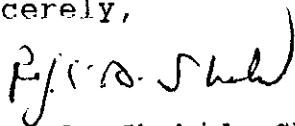
Piping test procedures should be modified to reflect those specified under Section 2635(b)(7), Title 23, CCR.

6. Sheets 8(a) and (b)

Provide manufacturer's specifications for Ameron Dualloy 3000/L and Total Containment secondary containment piping systems, including UL and/or ASME listing and product compatibilities.

Please respond to the above list of items through the submittal, in triplicate, of amended installation plans. 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  
Mike Hood, Alameda County Building & Inspection Dept.  
Bob Bohman, Castro Valley Fire Dept.  
Scott Hugenberger, RWQCB  
Scott Seery, Alameda County Hazardous Materials Division  
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ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0782

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:

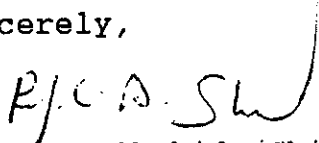
1. Provide the EPA Waste Generator Identification Number for this site. (Item 5)
2. Provide the name, address and phone number of the prime contractor engaged in tank removals. Indicate the contractor's license number and license type. (Item 6)
3. The total number of tanks at this facility is six (6) 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

ALAMEDA COUNTY  
HEALTH CARE SERVICES

DAVID J. KEARS AGENCY

~~XXXXXXXXXXXX~~ Agency Director



R0782

470-27th Street, Third Floor  
Oakland, California 94612  
(415) 271-4320

April 13, 1988

Alex Woelper  
Arco Petroleum Products  
3134 Auburn Blvd.  
Sacramento, CA 95821

Re: Arco Station #2152, 22141 Center St., Castro Valley, CA

Dear Mr. Woelper:

We have received your letter dated, April 4, 1988, along with tank test results at the above site. A leak was detected in the unleaded tank.

You are in violation of Section 25189.5, Health and Safety Code, which prohibits the disposal of any hazardous waste at any point which is no an authorized disposal site.

Section 66328(d), Title 22, California Administrative Code, states, if corrections are needed, the operator shall provide the department with a written plan of correction, which states the actions to be taken and the expected date of completion.

Your plan should include, but shall not be limited to the following:

1. Method to determine the extent of the vertical and lateral contamination.
2. Name of certified analytical laboratory that will perform the testing.
3. Name of the licensed hazardous waste hauler (if necessary).
4. Name of disposal facility (if necessary).

Please submit your plan within thirty (30) days of the receipt of this letter.

Alex Woelper  
Arco Petroleum Products  
Sacramento, CA 95821  
RE: 22141 Center St. Castro Valley  
April 13, 1988  
Page 2 of 2

If you have any questions, please contact Larry Seto, Hazardous Materials Specialist, at 271-4320.

Sincerely,

*R/c A. Shahid*

Rafat A. Shahid, Chief,  
Hazardous Materials Division

RAS:LS:mnc

cc: Dwight Hoenig, DOHS  
Gil Jensen, Alameda County District Attorney, Consumer & Environmental Protection Agency