

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0529

RAFAT A. SHAHID, Assistant Agency Director

StID 198

November 14, 1995

Pastor Cho  
East Bay Korean Baptist Church  
2000 E. 12th Street  
Oakland, CA 94606

Alameda County  
Environmental Protection Division  
1131 Harbor Bay Parkway, Room 250  
Alameda CA 94502-6577  
(510) 567-6700

RE: Well Decommission at 2032 E. 12th Street, Oakland 94606

Dear Pastor Cho:

This office and the S.F. RWQCB have reviewed the case closure summary for the above referenced site and concur that no further action related to the underground tank release is required at this time. Before a remedial action completion letter is sent, the onsite monitoring wells, MW-1, 2, and 3, should be decommissioned, if they will no longer be monitored. Please notify this office upon completion of well destruction so a closure letter can be issued.

Well destruction permits may be obtained from Alameda County Flood Control and Water Conservation, Zone 7. They may be reached at (510) 484-2600.

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

Sincerely,

eva chu  
Hazardous Materials Specialist

cc: Paul King, 4020 Panama Ct, Oakland 94611  
files

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



R0529

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program

December 28, 1994  
STID # 198

Pastor Cho  
2000 E. 12th St.  
Oakland, CA 94606

Alameda County Environmental Health  
Environmental Protection Division  
1131 Harbor Bay Parkway, Rm. 250  
Alameda, CA 94502-6577 CC:430-4510

Re: 2032 E. 12th St., Oakland, 94606, formerly Stanley Wong's  
Arco

Dear Pastor Cho:

This office has reviewed the a Quarterly Groundwater Monitoring and Sampling Report for the above site. The discussion and recommendations on page 3 are acceptable to this office. Groundwater no longer should be an issue. The consultant recommended soil borings to evaluate the extent of any remaining petroleum contamination. This is agreeable to this office. Presentation of clean samples should be followed shortly by site closure which you are pursuing.

Please contact this office should you have any questions regarding this letter at 567-6782. Note our new address.

Sincerely,

Thomas Peacock  
Supervising Hazardous Materials Specialist

cc: Gil Jensen, Alameda County District Attorney's Office  
Robert Lee, One Daniel Burnham Ct., Suite 205C, San  
Francisco, CA 94109

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



R0529

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH

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

October 28, 1994  
STID # 198

Pastor Cho  
2000 E. 12th St.  
Oakland, CA 94606

Re: Workplan for further Site Assessment at 2032 E. 12th St.,  
Oakland, 94606, formerly Stanley Wong's Arco

Dear Pastor Cho:

This office has reviewed the above workplan from Mobile Labs,  
Inc. dated October 19, 1994 for further work on the above site.  
The following are comments concerning this workplan:

1. There seem to be already 3 monitoring wells at this location,  
which have been sampled only twice. It has been about 2 years  
since the last sampling. The report presents proposed wells when  
in fact they should already exist. These wells need to be  
sampled for TPHg, TPHd, O & G, and BTEX, as soon as possible.  
Also the groundwater gradient needs to be determined.
2. Although additional soil sampling is proposed in this plan it  
does not seem that this is warranted at this time.

Normally 4 consecutive rounds of groundwater monitoring are  
required for site closure. Decisions must be made based upon the  
data provided. Since it has been a long time since the last  
sampling no conclusions can be drawn concerning whether there is  
any contamination remaining in the groundwater.

Implementation of this plan should commence within 30 days.

Please contact this office should you have any questions  
regarding this letter at 567-6782. Note our new address.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Thomas Peacock'.

Thomas Peacock  
Supervising Hazardous Materials Specialist

cc: Gil Jensen, Alameda County District Attorney's Office  
Robert Lee, One Daniel Burnham Ct., San Francisco, CA 94109

Alameda County Health Care Services Agency, Department of  
Environmental Health, Hazardous Materials Division

In Re The Property Known As :

STID 198

2032 E. 12th St.

Oakland, CA 94606

\_\_\_\_\_ )

Proof of Service of  
Notice of  
Pre-Enforcement  
Review Panel

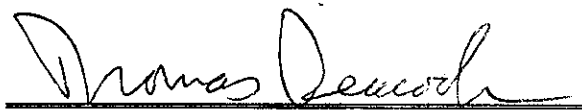
I Thomas Peacock, do hereby certify

that I served Pastor Cho

with a copy of the attached **Notice of Pre-Enforcement Review**  
**Panel on September 8, 1994** by certified

mailer # P 386 338 379

Dated: 9/8/94



(signature)

**Alameda County Health Care Services Agency, Department of Environmental  
Health, Hazardous Materials Division**

In Re The Property Known As : )  
STID 198 )  
2032 E. 12th St. )  
Oakland, CA 94606 )  
\_\_\_\_\_ )

**Notice of  
Pre-Enforcement  
Review Panel**

Notice is hereby given that upon the motion of the Alameda County Hazardous Materials Division, and the San Francisco Bay Regional Water Quality Control Board a **Review Panel** will convene on September 27, 1994 at 9:00 a.m. in the offices of the Alameda County Hazardous Materials Division located at 80 Swan Way, Room 200, Oakland, CA 94621. This **Review Panel** will convene for the purpose of determining responsible parties as well as appropriate closure, site assessment, clean-up and mitigation of contamination at the above location.

The Alameda County Hazardous Materials Division, and the San Francisco Bay Regional Water Quality Control Board have named and served notice of this **Review Panel** on the following persons or entities as having proposed responsibility for closure, site assessment, clean-up and mitigation of contamination at the above location, and by this notice all parties named herein are informed of the right to appear and show cause, if any they have, for the exclusion or inclusion of any of the parties served herein from said responsibility or obligations:

1. Pastor Cho  
East Bay Korean Baptist Church  
(name)  
2000 E. 12th St., Oakland, CA 94606  
(address)

Dated: September 8, 1994



(signature)

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



R0529

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program  
80 Swan Way, Rm 200  
Oakland, CA 94621  
(510) 271-4530

March 30, 1993  
STID # 198

Mr. Robert Lee  
2554 Martin Luther King Jr. Way  
Berkeley, CA 94704

Re: Status of Remediation at 2032 E. 12th St., Oakland CA 94606,  
formerly Stanley Wong's Arco

**FINAL NOTICE OF VIOLATION**

Dear Mr. Lee:

You were sent a letter regarding requirements for cleaning up the above site subsequent to underground fuel tank removals at the above site. Upon review of the July 12, 1991 report by Earth Systems Environmental, Inc. and conversation with your consultant, Mr. Mark Margargee, it appears that the following items still need to be addressed :

1. The County requests the verification of the disposition of the stockpiled soils from this site. This apparently amounted to about 100 cubic yards.
2. The County has documentation of soil samples taken in an area where a gasoline tank was reportedly removed over twenty years ago. This area is just north of the existing office. These results were provided by Mr. Jack Quarle of J. Quarle and Associates. The results indicate gasoline contamination upwards to 280 mg/kg, (ppm). Please state what will be done to verify that no soil or groundwater contamination still exists in this area.
3. The initial results from the gasoline tank removal found 490 ppm Total Oil and Grease (TO&G) and 1800 ppm Total Petroleum Hydrocarbons as gasoline (TPHg) in the Excavation East Wall. Please provide evidence that this area was further investigated to determine the extent of this soil contamination.
4. The Earth Systems Environmental (ESE) report describes the results of additional soil borings taken on the east side of the former waste oil pit. These results indicate

Mr. Robert Lee  
STID # 198  
2032 E. 12th St.  
March 30, 1993  
Page 2 of 2

the presence of oil and grease in the north and south ends of the excavation. The ESE report recommends performing an additional four borings to determine the extent of this contamination. This is acceptable. It was also noted that 213 ppm TO&G was left in place in the north bay area of the office. A risk assessment and geological data must be provided if you intend to leave these amounts of petroleum hydrocarbon in place without remediation.

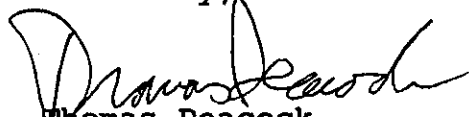
5. Please note that the downgradient monitoring well to the former waste oil pit, MW-2, should be sampled and analyzed for the waste oil parameters required by the Tri-Regional Board Guidelines, ie the metals: cadmium, chromium, lead, nickel and zinc, chlorinated solvents by Method 8010 and semi-volatiles by Method 8270 in addition to TPHg, BTEX, (benzene, toluene, ethylbenzene and xylenes), and TO&G which were analyzed for in this investigation.

6. A minimum of four consecutive quarters of groundwater sampling and analysis and groundwater elevation measurements must be performed prior to consideration for case closure. The analytical results must indicate no hydrocarbon impact to the groundwater.

You were requested to respond to these items in writing within thirty (30) days from the June 29, 1992 letter. This was again requested in a **SECOND NOTICE OF VIOLATION** dated November 23, 1992. To date, this office has not received any contact regarding these items or this site. Please respond within 30 days and provide the information requested as required by Title 23, Div. 3, Chap. 16, Art. 11, 2722 of the California Administrative code.

Please contact this office should you have any questions regarding this letter.

Sincerely,



Thomas Peacock  
Supervising Hazardous Materials Specialist

cc: Gil Jensen, Alameda County District Attorney's Office  
R. Hiett, RWQCB

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



R0529

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program  
80 Swan Way, Rm 200  
Oakland, CA 94621  
(510) 271-4530

November 23, 1992  
STID # 198

Mr. Robert Lee  
2554 Martin Luther King Jr. Way  
Berkeley, CA 94704

Re: Status of Remediation at 2032 E. 12th St., Oakland CA 94606,  
formerly Stanley Wong's Arco

**SECOND NOTICE OF VIOLATION**

Dear Mr. Lee:

You were sent a letter regarding requirements for cleaning up the above site subsequent to underground fuel tank removals at the above site. Upon review of the July 12, 1991 report by Earth Systems Environmental, Inc. and conversation with your consultant, Mr. Mark Margargee, it appears that the following items still need to be addressed :

1. The County requests the verification of the disposition of the stockpiled soils from this site. This apparently amounted to about 100 cubic yards.
2. The County has documentation of soil samples taken in an area where a gasoline tank was reportedly removed over twenty years ago. This area is just north of the existing office. These results were provided by Mr. Jack Quarle of J. Quarle and Associates. The results indicate gasoline contamination upwards to 280 mg/kg, (ppm). Please state what will be done to verify that no soil or groundwater contamination still exists in this area.
3. The initial results from the gasoline tank removal found 490 ppm Total Oil and Grease and 1800 ppm Total Petroleum Hydrocarbons as gasoline (TPHg) in the Excavation East Wall. Please provide evidence that this area was further investigated to determine the extent of this soil contamination.
4. The Earth Systems Environmental (ESE) report describes the results of additional soil borings taken on the east side of the former waste oil pit. These results indicate



Mr. Robert Lee  
STID # 198  
2032 E. 12th St.  
November 23, 1992  
Page 2 of 2

the presence of oil and grease in at least two areas, the north and south ends of the excavation. The ESE report recommends performing an additional four borings to determine the extent of this contamination. This proposal is acceptable and may proceed without further notice. It was also noted that 213 ppm oil and grease was left in place in the north bay area of the office. A risk assessment and geological data must be provided if you intend to leave these amounts of petroleum hydrocarbon in place without remediation.

5. Please note that the downgradient monitoring well to the former waste oil pit, MW-2, should be sampled and analyzed for the waste oil parameters required by the Tri-Regional Board Guidelines, ie the metals: cadmium, chromium, lead, nickel and zinc, chlorinated solvents by Method 8010 and semi-volatiles by Method 8270 in addition to Total Petroleum Hydrocarbons as gasoline, BTEX, (benzene, toluene, ethylbenzene and xylenes), and Total Oil and Grease which were analyzed for in this investigation.

6. A minimum of four consecutive quarters of groundwater sampling and analysis and groundwater elevation measurements must be performed prior to consideration for case closure. The analytical results must indicate no hydrocarbon impact to the groundwater.

You were requested to respond to these items in writing within thirty (30) days from the June 29, 1992 letter. To date, this office has not received any contact regarding these items or this site. Please respond within 30 days and provide the information requested as required by Title 23, Div. 3, Chap. 16, Art. 11, 2722 of the California Administrative code.

Please contact this office should you have any questions regarding this letter.

Sincerely,



Thomas Peacock  
Supervising Hazardous Materials Specialist

cc: M. Thomson, Alameda County District Attorney Office  
R. Hiett, RWQCB  
Enclosures

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director

June 29, 1992

STID # 198

State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program

RAFAT A. SHAHID, Assistant Agency Director

Mr. Robert Lee  
2554 Martin Luther King Jr. Way  
Berkeley, CA 94704

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

Re: Status of Remediation at 2032 E. 12th St., Oakland CA 94606,  
formerly Stanley Wong's Arco

Dear Mr. Lee:

This letter is in response to our recent phone conversation regarding the current status of remediation of the above site. Upon review of the July 12, 1991 report by Earth Systems Environmental, Inc. and conversation with your consultant, Mr. Mark Margargee, it appears that the following items still need to be addressed prior to consideration for site closure: Please note some of these items appeared in my January 9, 1991 letter to you.

1. The County requests the verification of the disposition of the stockpiled soils from this site. This apparently amounted to about 100 cubic yards.
2. The County has documentation of soil samples taken in an area where a gasoline tank was reportedly removed over twenty years ago. This area is just north of the existing office. These results were provided by Mr. Jack Quarle of J. Quarle and Associates. The results indicate gasoline contamination upwards to 280 mg/kg, (ppm). Please state what will be done to verify that no soil or groundwater contamination still exists in this area.
3. The initial results from the gasoline tank removal found 490 ppm Total Oil and Grease and 1800 ppm Total Petroleum Hydrocarbons as gasoline (TPHg) in the Excavation East Wall. Please provide evidence that this area was further investigated to determine the extent of this soil contamination.
4. The Earth Systems Environmental (ESE) report describes the results of additional soil borings taken on the east side of the former waste oil pit. These results indicate the presence of oil and grease in at least two areas, the north and south ends of the excavation. The ESE report recommends performing an additional four borings to determine the extent of this contamination. This proposal is acceptable and may proceed without further notice. It was also noted that 213 ppm oil and grease was left in place in the north bay area of the office. A risk assessment and geological data must be provided if you intend to leave these amounts of petroleum hydrocarbon in place without remediation.

Mr. Robert Lee  
STID # 198  
2032 E. 12th St.  
June 29, 1992  
Page 2.

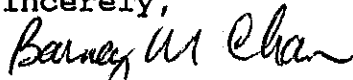
5. Please note that the downgradient monitoring well to the former waste oil pit, MW-2, should be sampled and analyzed for the waste oil parameters required by the Tri-Regional Board Guidelines, ie the metals: cadmium, chromium, lead, nickel and zinc, chlorinated solvents by Method 8010 and semi-volatiles by Method 8270 in addition to Total Petroleum Hydrocarbons as gasoline, BTEX, (benzene, toluene, ethylbenzene and xylenes), and Total Oil and Grease which were analyzed for in this investigation. After the initial analysis for all parameters, modification of analysis parameters can be considered.

6. A minimum of four consecutive quarters of groundwater sampling and analysis and groundwater elevation measurements must be performed prior to consideration for case closure. The analytical results must indicate no hydrocarbon impact to the groundwater.

With these conditions in mind, you are requested to respond to these items in writing within thirty (30) days. Your response should answer all questions and propose a time schedule for future work performance.

You may contact me at (510) 271-4320 should you have any questions regarding this letter.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

cc: M. Thomson, Alameda County District Attorney Office  
R. Hiatt, RWQCB  
J. Johnson, Mobile Labs Inc., 4400 Isla Verde, Ste. 5,  
Bakersfield, CA 93301  
M. Magargee, Earth Systems Environmental, Inc., 6701 McDivitt  
Drive, Suite B, Bakersfield, CA 93313

2032E121

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0529

January 9, 1991

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

Mr. Robert Lee  
2554 Martin Luther King Jr. Way  
Berkeley, CA 94704

Re: Remediation at 2032 E. 12th St., Oakland CA 94606, formerly  
Stanley Wong's Arco.

Dear Mr. Lee:

First, I would like to inform you that Ariu Levi has given this site to Barney Chan, who will now be your contact. Please be assured that any type of approvals and conditions that Mr. Levi may have stated to you verbally or in writing are still valid although Mr. Chan may have other concerns which have yet to surface. I would like to clarify the conversation that you had with Mr. Chan on January 8, 1991 regarding the disposition of stockpiled soil and the submittal of a Site Safety Plan for the continuance of the proposed work at this location. It appears that there were two issues of concern to Mr. Levi, one, regarding the proper disposition of all stockpiled soils and two, the need for a Site Safety Plan before proceeding with the proposed work plan. In the above referenced conversation with Mr. Chan, it was stated that the disposition of stockpiled soils was up to your consultant. That is, the County does not recommend a specific method to dispose of stockpiled soils. This means that onsite remediation, with the approval of all concerned agencies (BAAQMD, DOHS, RWQCB, EBMUD, et al) is acceptable, as is disposal at an appropriate landfill with proper analytical characterization of the soils. Please be advised whichever method(s) you choose Alameda County will require documentation of the final disposition of all spoils, in the form of manifests or weight tags, before we can make any recommendation for site closure. It was informed that disposal to a Class III landfill was proposed initially for part of the stockpiled soil. Upon investigation by Mr. Levi, it was discovered that one landfill in particular would not accept soil with the initial hydrocarbon concentrations found in your stockpiled soil.

Concerning the other issue, we are in receipt of the Site Safety Plan for the installation of groundwater monitoring wells at the above location. As agreed previously by Mr. Levi, this letter serves as our agency's approval to proceed with the proposed groundwater monitoring well installations.

Mr. Robert Lee  
2032 E. 12th St.  
January 9, 1991  
Page 2.

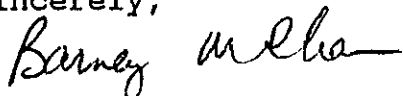
Several other items need clarification as you proceed in workplan:

1. Due to the uncertainty of of the final disposition of stockpiles soils, the County requests notification of the type(s) of methods which have or are proposed to be used to characterize, remediate and dispose of all stockpiled soils. It is my understanding that this amounts to minimally 100 cubic yards of soil.
2. In the prior reports it was stated that at the location of the former waste oil pit, the several discrete samples which were taken on March 1, 1990 to verify lateral extent of contamination. These samples were analyzed for only Total Petroleum Hydrocarbons and BTEX but not for Total Oil and Grease, the metals: cadmium, chromium, nickel, lead and zinc, chlorinated hydrocarbons and semi-volatiles by Method 8270 as is recommended by the Tri-Regional Board Guidelines. At least one of the future sidewall samples which are proposed to be taken at 20 foot intervals in native soil should be analyzed for all the parameters in addition to Total Petroleum Hydrocarbons and BTEX.
3. Prior analytical reports from Brown and Caldwell indicate that another underground tank previously existed on this site to the north side of the former office/ shop area. Soil samples with Total Petroleum Hydrocarbons up to 290 ppm were found at this location. Although this level is below any action level you should be aware that future monitoring well results could be influenced by this potential residual hydrocarbon.
4. Concerning soil samples taken from the boring of the monitoring wells, our concern is whether your field screening method can detect all the potential contamination. If a discolored or odorous sample is detected it should be analyzed even if the field screening does not indicate contamination.

Enclosed please find a copy of the Site Safety Plan as presented to our office for review by Aqua Geosciences, Inc.

Please contact the undersigned at 271-4320 should you have any questions regarding this letter.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

cc: Gil Jensen, District Attorney Office, Consumer and  
Environmental Protection Division  
L. Feldman, RWQCB  
H. Hatayama, DOHS  
Edgar Howell, Chief Hazardous Materials Division

MA



R0529

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

Certified Mail P 062 128 080

September 15, 1989

Mr. Stanley Wong  
Wong's Arco  
2032 E. 12th Street  
Oakland, CA 94606

Subject: Unauthorized Release  
Removal of Underground Fuel and Waste Oil Tanks  
2032 E. 12th Street  
Oakland, CA 94606

Dear Mr. Wong:

Thank you for submitting the results for analysis of subsurface soil and ground water samples taken in response to the underground tank removals from the above shown facility. Because of the degree of contamination found, this facility is considered to have experienced a confirmed release of petroleum hydrocarbons that has impacted subsurface soil and ground water. The extent of this contamination must be assessed and remediated.

Our office will be the lead agency overseeing both the soil and groundwater remediation of this site. The Regional Water Quality Control Board (RWQCB) is currently unable to oversee the large number of contamination cases within Alameda County and has delegated the handling of this case to our Division. We will be in contact with the RWQCB in order to provide you with guidance concerning the RWQCB's remediation requirements. However, please be aware that you are responsible for diligent actions to protect waters of the State.

To complete contaminant assessment and begin remediation, we require that you submit a work plan which, at a minimum, addresses the items listed below and presents a timetable for their completion. Please submit this workplan within 30 days of the date of this letter.

Wong's Arco  
September 15, 1989  
Page 2

## I. Introduction

- A. Statement of scope of work
- B. Site map showing location of past underground storage tanks and lifts
- C. Site History
  - provide historical site use and ownership information. Include a description of types and locations of hazardous materials used on site.

## II. Site Description

- A. Vicinity description including hydrogeologic setting
- B. Initial soil contamination and excavation results
  - provide sampling procedures used
  - indicate depth to ground water
  - describe soil strata encountered
  - provide soil sampling results, chain of custody forms, identity of sampler
  - describe methods for storing and disposal of all soils
  - provide TOG and 8240/8010&8020 results for waste oil pit samples.

## III. Plan for determining extent of soil contamination on site

- A. Describe approach to determine extent of lateral and vertical contamination
  - identify subcontractors, if any
  - identify methods or techniques used for analysis
  - provide sampling map showing all lines of excavation and sampling points
  - if a step out procedure is used, define action level for determination of "clean" isopleth
  - provide chain of custody forms, lab analysis results, all receipts and manifests, & identity of sampler
- B. Describe method and criteria for screening clean versus contaminated soil. If onsite soil aeration/bioremediation is to be utilized, then provide a complete description of method that includes:
  - volume and rate of aeration/turning
  - method of containment and cover
  - wet weather contingency plans
  - permits obtained
  - soil composite results, 1 per 50 cubic yards
- C. Describe security measures

Wong's Arco  
September 15, 1989  
Page 3

#### IV. Plan for determining ground water contamination

- Construction and placement of wells should adhere to the requirements of the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks". Provide a description of placement and rationale for the location of monitoring wells including a map to scale.
- The placement and number of wells must be able to determine the extent and magnitude of the free product and dissolved product plumes.

##### A. Drilling method for construction of monitoring wells

- expected depth and diameter of monitoring wells
- date of expected drilling
- casing type, diameter, screen interval, and pack and slot sizing techniques
- depth and type of seal
- development method and criteria for adequacy of development
- plans for cuttings and development water

##### B. Ground water sampling plan

- method for free product measurement, observation of sheen
- well purging procedures
- sample collection procedures
- chain of custody procedures
- procedures for determining ground water gradient

##### D. Sampling schedule

- measure free product weekly for first month following well installation
- measure free product and dissolved constituents monthly for first three months.
- after first three months monitor quarterly.
- monitoring must occur a minimum of one year.

#### V. Provide a site safety plan



Wong's Arco  
September 15, 1989  
Page 4

## VI Development of a remediation Plan.

- A. The remediation plan is to include a time schedule for remediation, and, at minimum, must address the following issues:
- removal of all free product. Manual bailing is not acceptable as a recovery system. Actual amount of free product removed must be monitored and tabulated.
  - remediation of contaminated soils and dissolved constituents must follow RWQCB's resolution No. 68-16.
  - soils containing 1,000+ ppm of hydrocarbons must be remediated. Soils containing between 100 and 1,000 ppm must be remediated unless sufficient evidence is provided which indicates no adverse effects on groundwater will occur. Clean up of soils to 100 ppm is strongly recommended.
  - design of remedial action system should be based on a review of hydrogeologic and water quality data and on an evaluation of mitigation alternatives. The determination of probable capture zone(s) of extraction system(s) should be based on aquifer characteristics as determined by aquifer test data

## VII Reporting

- A. Technical reports should be submitted with a cover letter from the property owners. The letter must be signed by an owner or by an authorized representative of that person.
- B. Monthly reports must be submitted for the next three months with the first report due 90 days from the above letter date.
- C. Quarterly reports must be submitted with the first report due 90 days after the final monthly report. These reports should describe the status of the investigation and cleanup.
- D. All reports and proposals must be signed by a California-Certified Engineering Geologist, California Registered Geologist or a California-Registered Civil Engineer (see page 2, 2 June 1988 RWQCB document). A statement of qualifications should be included in

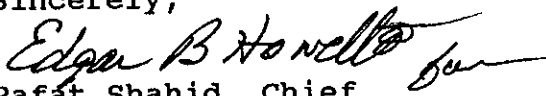
Wong's Arco  
September 15, 1989  
Page 5

all reports. Initial tank removal and soil sampling does not require such expertise; however, borehole and monitoring well installation and logging, and impact assessments do require such a professional.

All proposals, reports and analytical results pertaining to this investigation and remediation must be sent to our office and RWQCB. You should be aware that this Division is working in conjunction with the RWQCB and that this is a formal request for technical reports pursuant to California Water Code Section 13267 (b). Failure to respond or a late response may result in referral of this case to the RWQCB for enforcement and may subject the property owners to civil liabilities imposed by the RWQCB to a maximum amount of \$1,000 per day.

Should you have any questions concerning the contents of this letter or the status of this case please contact Ariu Levi, Hazardous Materials Specialist, at 415-271-4320.

Sincerely,

  
Rafat Shahid, Chief  
Hazardous Materials Program

cc: Gil Jensen, Alameda County District Attorney, Consumer &  
Environmental Protection

Lester Feldman, RWQCB  
Howard Hatayama, DOHS  
Inspector Meyer, OFD  
Jack Quarle, Contractor  
Files