

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



SWT  
8-14-06

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

August 11, 2006

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis Street  
Fremont, CA 94538

Subject: Fuel Leak Case No. RO0000096, Eagle Gas, 4301 San Leandro Street, Oakland, CA

Dear Ms. Naz:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Response to Technical Comments," dated July 7, 2006 and received by ACEH on July 20, 2006. The document presents responses to technical comments in ACEH correspondence dated June 27, 2006. We request that you submit a Work Plan to conduct additional investigation by **September 22, 2006**. An additional response to comments should not be submitted.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

**TECHNICAL COMMENTS**

1. **Grab Groundwater Sample Data Quality.** Plans for depth-discrete grab groundwater sampling are to be included in the Work Plan requested below.
2. **Water Level Differences and Unrealistic Hydraulic Gradients.** Our previous technical comment remains applicable. Please review the existing water level data, soil boring logs, and well construction data for the site to help identify possible causes for the significant differences in water levels between adjacent wells across the site. In the Work Plan requested below, please propose data collection to identify the most likely cause of the water level differences and assess the predominant groundwater flow direction.
3. **Deep Monitoring Wells.** No changes to our previous technical comments are required. Please present plans for well installation in the Work Plan requested below.
4. **Search for Additional USTs.** We concur with the proposal to conduct a geophysical survey to search for additional USTs under and near the sidewalk along High Street. Please present the results of the geophysical survey in the Work Plan requested below.
5. **Chromatograph/Dating of MTBE.** We have no objection to review of existing and future chromatographs to assess whether the hydrocarbons detected in separate wells may be from separate sources. However, dating of petroleum hydrocarbons and MTBE does not appear

to be justified. If dating of petroleum hydrocarbons and MTBE is conducted, we recommend that the UST Cleanup Fund not reimburse you for these costs.

6. **Vapor Intrusion.** Please review the December 15, 2004 DTSC *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air* to plan the sequence for an investigation of potential vapor intrusion. Separate soil vapor samples should be collected around the perimeters or inside the off-site buildings to the southwest and southeast. Please present plans for soil vapor sampling in the Work Plan requested below.
7. **Leaking Water Lines.** We have no objection to analyzing selected groundwater samples for water treatment chemicals and coliform bacteria to look for water line or sewer leaks. Please present plans in the Work Plan requested below for analyzing selected groundwater samples for water treatment chemicals and coliform bacteria.
8. **Off-site Investigation.** We do not concur with the proposal to expand the investigation by installing wells in the upgradient direction. The technical comments regarding off-site investigation in our June 27, 2006 correspondence remain valid. Depth-discrete grab groundwater sampling provides a more cost effective means of plume delineation than installation of monitoring wells. Grab groundwater data should be used to delineate the off-site plume prior to well installation. Monitoring wells should not be installed at each grab groundwater sampling location. Therefore, two mobilizations will be required to delineate the plume and then install an appropriate monitoring well network. Please present plans to conduct the off-site investigation in the Work Plan requested below.
9. **Screened Intervals for Wells on Cross Sections.** In the future, please show the screened intervals for monitoring wells on the cross sections.
10. **Quarterly Groundwater Monitoring.** Please incorporate the newly installed wells into a quarterly monitoring program for the site. Analytical results for EDB, EDC, methanol, and ethanol are to be reviewed to assess whether analyses for these chemicals should be continued. Please present recommendations for quarterly monitoring in the Work Plan requested below.
11. **Interim Remediation.** Clearwater has on previous occasions emphasized the need to implement a "fast-track interim remediation," (June 13, 2005 correspondence entitled "Recommendations for Interim Remedial Action" from Clearwater to ACEH). The request for an extension and belief that interim remediation is not warranted at this time represents a significant change in site recommendations. In the Work Plan requested below, please include a discussion of how the proposed data collection will be used to plan interim remediation and propose a schedule for interim remediation.

#### TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **August 30, 2006** – Quarterly Groundwater Monitoring Report – Second Quarter 2006

- **September 22, 2006** – Work Plan
- **November 30, 2006** – Quarterly Groundwater Monitoring Report – Third Quarter 2006

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### ELECTRONIC SUBMITTAL OF REPORTS

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements ([http://www.swrcb.ca.gov/ust/cleanup/electronic\\_reporting](http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting)).

#### PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature,

and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

**UNDERGROUND STORAGE TANK CLEANUP FUND**

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

**AGENCY OVERSIGHT**

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,



Jerry Wickham  
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Robert Nelson, Clearwater Group, 229 Tewksbury Avenue, Point Richmond, CA 94801

Sunil Ramdass, SWRCB Cleanup Fund, 1001 I Street, 17<sup>th</sup> floor, Sacramento, CA 95814-2828

Shari Knierem, SWRCB Cleanup Fund, 1001 I Street, 17<sup>th</sup> floor, Sacramento, CA 95814-2828

Donna Drogos, ACEH  
Jerry Wickham, ACEH  
File

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



SCW  
06-28-06

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

June 27, 2006

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis Street  
Fremont, CA 94538

Subject: Fuel Leak Case No. RO0000096, Eagle Gas, 4301 San Leandro Street, Oakland, CA

Dear Ms. Naz:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the report entitled, "Soil and Groundwater Investigation Report," received on June 1, 2006. The report summarizes the results of a field investigation conducted between December 6, 2005 and April 2, 2006. The results indicate that highly elevated concentrations of fuel hydrocarbons are present in soil and groundwater beneath the site. Methyl tert-butyl ether (MTBE) was detected in more than 90 percent of the soil samples collected at concentrations up to 97 milligrams per kilogram (mg/kg). MTBE was detected in all groundwater samples collected at concentrations up to 770,000 micrograms per liter ( $\mu\text{g/L}$ ). Tert-butyl alcohol (TBA) was detected in more than 90 percent of the soil samples collected at concentrations up to 57 mg/kg. TBA was detected in all but one groundwater sample collected at concentrations up to 120,000  $\mu\text{g/L}$ . Groundwater contamination has likely moved off-site through a clayey gravel layer that underlies the site to a depth of approximately 12 feet and possibly through preferential pathways such as utility trenches. The "Soil and Groundwater Investigation Report," recommends several additional investigation tasks. We generally concur that additional investigation is required to fully characterize the site and request that you submit a Work Plan to conduct additional investigation **by September 1, 2006**.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

**TECHNICAL COMMENTS**

1. **Grab Groundwater Sample Data Quality.** The "Soil and Groundwater Investigation Report," states that the analytical results from a grab groundwater sample vary significantly from the analytical results from a groundwater sample collected from a monitoring well due primarily to suspended sediment in the grab groundwater sample. We disagree that the differences between analytical results for grab groundwater samples and groundwater samples collected from monitoring wells are due primarily to the suspended sediment in grab groundwater samples. Although analytical results can be affected by high turbidity, particularly for chemicals that are highly sorbed, it cannot be assumed that data from grab groundwater samples will be less accurate. Empirical studies as well as three-dimensional numerical simulations have shown that the groundwater samples collected from wells represent groundwater flux from the entire length of the well screen with higher permeability

zones having a higher flux. Water entering the well from different zones may have a range of contaminant concentrations. Therefore, the contaminant concentration measured in the sample represents the averaging effects due to vertical mixing throughout the screen interval. In addition, where a well partially penetrates an aquifer, the zone that is monitored extends above and below the screen. Grab groundwater samples are collected from shorter intervals and therefore, typically represent less vertical mixing. For volatile organic chemicals that are not highly sorbed, the contaminant concentrations measured in grab groundwater samples most likely are accurate with respect to the actual groundwater concentration within the targeted interval of the aquifer. Therefore, the concentrations measured in grab groundwater samples should not be discounted as less accurate when compared to concentrations measured in samples from monitoring wells. The vertical heterogeneity of the aquifer and the vertical distribution of water flowing into a well screen must be considered.

2. **Water Level Differences and Unrealistic Hydraulic Gradients.** Wells MW-1, MW-2, MW-3, MW-6, and MW-7 have significantly lower water levels than the remaining wells on site. The hydraulic gradients estimated from groundwater elevation contours shown on Figure 3 along the southwestern and northwestern portions of the site do not appear to be within the range of normal or realistic hydraulic gradients for the soil and groundwater conditions encountered at the site. As an example, wells EW-1 and MW-2, which are approximately 20 feet apart in the southern portion of the site, are constructed with similar screened intervals but the water level in well EW-1 is more than 4 feet higher than the water level in well MW-2, resulting in an apparent hydraulic gradient of more than 20 percent. A continuous gravel layer, which should be able to effectively transmit groundwater, is shown on cross section B-B' extending between the two wells. Please review the existing water level data, soil boring logs, and well construction data for the site to help identify possible causes for the significant differences in water levels between adjacent wells across the site. In the Work Plan requested below, please propose data collection to identify the most likely cause of the water level differences and assess the predominant groundwater flow direction.
3. **Deep Monitoring Wells.** Monitoring wells MW-4D and MW-5D ("deep wells") were both screened over the interval from 35 to 45 feet bgs. ACEH specifically requested (September 21, 2005) that pilot borings be continuously logged in order to identify and target permeable zones rather than install the wells at the fixed interval of 35 to 45 feet bgs. In addition, we requested that the filter pack and screen intervals for monitoring wells screened below the water table should not exceed 5 feet in length. Wells MW-4D and MW-5D were both screened across intervals of largely fine-grained CL soils and therefore, may not intersect coarse-grained layers that may be preferential pathways. In order to address this data gap, we request that one "deep" monitoring well be installed within the thick sequence of sands encountered between approximately 25 and 45 feet bgs in boring SB-7D and one "deep" monitoring well be installed along the southwestern boundary of the site. The well along the southwestern boundary of the site should be installed in order to intercept contamination migrating to the southwest from source areas at the site. Please review our previous technical comments on grab groundwater sampling and well installation in our September 21, 2005 correspondence. Please present plans for well installation in the Work Plan requested below.
4. **Search for Additional USTs.** We concur with the proposal to conduct a geophysical survey to search for additional USTs under and near the sidewalk along High Street. Please present the results of the geophysical survey in the Work Plan requested below.

5. **Chromatograph/Dating of MTBE.** Please provide further rationale in the Work Plan requested below on how the dating of MTBE at the site would be used.
6. **Vapor Intrusion.** We concur that an evaluation of potential vapor intrusion into on-site and off-site buildings should be performed. Please present plans in the Work Plan requested below to evaluate the potential for on-site and off-site indoor vapor intrusion.
7. **Leaking Water Lines.** We have no objection to analyzing selected groundwater samples for water treatment chemicals and coliform bacteria to look for water line or sewer leaks. However, please note that we request additional investigation of the anomalous water levels at the site as discussed in technical comment 2 above.
8. **Off-site Investigation.** The proposal to locate a total of four soil borings upgradient and downgradient of the site will not be sufficient for the off-site investigation. Given the known sources and high elevated levels of contamination on site, it is not clear why an off-site investigation would focus on the area upgradient of the site. The off-site investigation should focus on delineating the extent of groundwater contamination and the potential for the plume to affect off-site receptors. Therefore, the off-site investigation should delineate the plume in the downgradient regional groundwater flow direction, along preferential pathways, and in the direction of potential discharge to Peralta (Adams) Creek. Grab groundwater sampling must be considered to delineate the plume prior to installation of off-site wells. Given the uncertainty of the local hydraulic gradient at the site due to anomalous water levels in the on-site monitoring wells, the use of rapid characterization techniques such as grab groundwater sampling should be emphasized. Please present plans to conduct the off-site investigation in the Work Plan requested below.
9. **Screened Intervals for Wells on Cross Sections.** In the future, please show the screened intervals for monitoring wells on the cross sections.
10. **Quarterly Groundwater Monitoring.** Please incorporate the newly installed wells into a quarterly monitoring program for the site. Analytical results for EDB, EDC, methanol, and ethanol are to be reviewed to assess whether analyses for these chemicals should be continued. Please present recommendations for quarterly monitoring in the Work Plan requested below.

#### **TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **July 1, 2006** – Interim Remediation Start-up Report
- **August 15, 2006** – Quarterly Groundwater Monitoring Report – Second Quarter 2006
- **September 1, 2006** – Work Plan
- **November 15, 2006** – Quarterly Groundwater Monitoring Report – Third Quarter 2006

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### ELECTRONIC SUBMITTAL OF REPORTS

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements ([http://www.swrcb.ca.gov/ust/cleanup/electronic\\_reporting](http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting)).

#### PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.



**UNDERGROUND STORAGE TANK CLEANUP FUND**

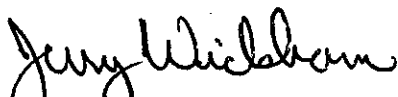
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

**AGENCY OVERSIGHT**

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,



Jerry Wickham  
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Robert Nelson  
Clearwater Group  
229 Tewksbury Avenue  
Point Richmond, CA 94801

Donna Drogos, ACEH  
Jerry Wickham, ACEH  
File

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



SENT  
05-08-06

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

May 5, 2006

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis Street  
Fremont, CA 94538

Subject: Fuel Leak Case No. RO0000096, Eagle Gas, 4301 San Leandro Street, Oakland, CA

Dear Ms. Naz:

You recently submitted a hard copy of a report for the above-referenced site entitled, "Quarterly Groundwater Monitoring Report – First Quarter 2006," dated April 14, 2006. Please note that effective January 31, 2006, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Hard copies of reports are no longer accepted. **Therefore, please upload the "Quarterly Groundwater Monitoring Report – First Quarter 2006," dated April 14, 2006 and all future reports to the Alameda County FTP site** as outlined in the following discussion of "Electronic Submittal of Reports," and the enclosed, "Electronic Report Upload (ftp) Instructions."

ELECTRONIC SUBMITTAL OF REPORTS

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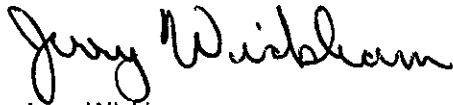
Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements ([http://www.swrcb.ca.gov/ust/cleanup/electronic\\_reporting](http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting)).

In order to facilitate electronic correspondence, we request that you provide up to date electronic mail addresses for all responsible and interested parties. Please provide current electronic mail addresses and notify us of future changes to electronic mail addresses by sending an electronic mail message to me at [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org).

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
May 5, 2006  
Page 2

If you have any questions, please call me at (510) 567-6791.

Sincerely,



Jerry Wickham  
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Jim Ho  
Clearwater Group  
229 Tewksbury Avenue  
Point Richmond, CA 94801

Donna Drogos, ACEH  
Jerry Wickham, ACEH  
File

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



SENT  
04-17-06

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

April 13, 2006

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis Street  
Fremont, CA 94538

Subject: Fuel Leak Case No. RO0000096, Eagle Gas, 4301 San Leandro Street, Oakland, CA

Dear Ms. Naz:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Bench Test for Using Advanced Oxidation – A Summary Report," dated March 27, 2006. The report summarized the results of bench tests for the treatment of groundwater at the site using ozone and ozone with hydrogen peroxide. Based on the low groundwater yield at the site and low treatment efficiency of ozone and ozone with hydrogen peroxide, the report included a recommendation that activated carbon would be more cost-effective. In an electronic mail message dated April 5, 2006, Mr. James Ho of Clearwater Group recommended a bench-scale test to confirm that activated carbon will be effective for the site. Mr. Ho also recommended conducting a bench test of an organic clay material with a strong capability to adsorb MTBE and TBA. Please conduct the proposed bench tests and use the results of the bench testing to recommend a groundwater treatment technology for the interim remediation system.

We request that you perform the proposed work and send us the reports described below.

**TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **May 17, 2006** – Quarterly Monitoring Report for the First Quarter 2006
- **May 23, 2006** – Soil and Groundwater Investigation Report with Recommendations for Off-site Investigation
- **July 1, 2006** – Interim Remediation Start-up Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

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In order to facilitate electronic correspondence, we request that you provide up to date electronic mail addresses for all responsible and interested parties. Please provide current electronic mail addresses and notify us of future changes to electronic mail addresses by sending an electronic mail message to me at [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org).

### PERJURY STATEMENT

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**UNDERGROUND STORAGE TANK CLEANUP FUND**

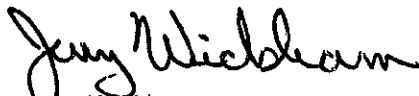
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Sincerely,



Jerry Wickham  
Hazardous Materials Specialist

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Donna Drogos, ACEH  
Jerry Wickham, ACEH  
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ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



sent 11-2-05

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November 1, 2005

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis Street  
Fremont, CA 94538

Subject: Fuel Leak Case No. RO0000096, Eagle Gas, 4301 San Leandro Street, Oakland, CA

Dear Ms. Naz:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Response to Comments - Soil and Groundwater Investigation Work Plan," dated October 6, 2005 and received by ACEH on October 28, 2005. The response to agency comments adequately addresses ACEH technical comments #2 and #3 on the "Soil and Groundwater Investigation Work Plan," dated August 10, 2005. ACEH concurs with the proposed scope of work provided that the remaining technical comments in addition to technical comments #2 and #3 are also addressed during implementation of field activities at the site.

We request that you address the technical comments during field activities, perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org)) prior to the start of field activities.

**TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **January 13, 2006** – Interim Remediation Start-up Report
- **January 17, 2006** – Quarterly Report for the Fourth Quarter 2005
- **March 13, 2006** – Soil and Groundwater Investigation Report with Recommendations for Off-site Investigation

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information on these requirements ([http://www.swrcb.ca.gov/ust/cleanup/electronic\\_reporting](http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting)).

#### PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

#### UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

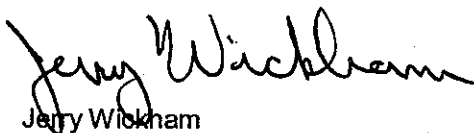


**AGENCY OVERSIGHT**

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,



Jerry Wickham  
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Jim Ho  
Clearwater Group  
229 Tewksbury Avenue  
Point Richmond, CA 94801

Donna Drogos, ACEH  
Jerry Wickham, ACEH  
File

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



SENT 9-22-05

ENVIRONMENTAL HEALTH SERVICES  
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September 21, 2005

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis Street  
Fremont, CA 94538

Subject: Fuel Leak Case No. RO0000096, Eagle Gas, 4301 San Leandro Street, Oakland, CA

Dear Ms. Naz:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the documents entitled, "Soil and Groundwater Investigation Work Plan," dated August 10, 2005 and "Quarterly Groundwater Monitoring Report - Third Quarter 2005," dated September 8, 2005. Both documents were prepared on your behalf by Clearwater Group. ACEH requests that a response to agency comments be submitted (e-mail preferred to [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org)) to address the technical comments below prior to implementing the field investigation proposed in the Work Plan.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org)) prior to the start of field activities.

**TECHNICAL COMMENTS**

1. **Section 8 - Design and Operation of the Interim Remedial System.** In correspondence dated July 25, 2005, ACEH indicated no objection to implementation of the proposed groundwater extraction wells and oxygen diffusion iSOC wells prior to implementing the site investigation. Mr. Jim Ho and Mr. James Jacobs of Clearwater Group met with ACEH staff on September 7, 2005 to provide an overview of the planned interim remedial system.
2. **Proposed Borings and Screen Intervals for Monitoring Wells.** The Work Plan currently proposes to drill and sample seven borings and then to over drill each boring and install monitoring wells. Soil samples and grab groundwater samples are to be collected during drilling. The Work Plan proposes to install monitoring wells at fixed intervals of 10 to 25 feet bgs for the shallow wells and 35 to 45 feet bgs for the "deep" wells. ACEH concurs with the proposed boring locations but requests that a different approach be used to select intervals for soil and groundwater sampling. ACEH requests that a pilot boring be drilled with continuous soil sampling to a depth of 50 feet bgs at five locations (MW-4, MW-5, MW-6, MW-7, and MW-8). The continuous soil samples are to be logged in detail with each soil layer described in detail and all PID readings and observations of staining or odor recorded. Soil samples are to be collected for analyses at minimum five-foot intervals and from all zones where elevated PID readings, odor, or staining are observed. Intervals for grab groundwater sampling and screen intervals for monitoring wells are to be selected based on

review of the boring logs from the pilot borings. Soil layers where significant contamination was observed and permeable soil layers below the screen intervals for the proposed shallow monitoring wells, are to be targeted for groundwater sampling (see next comment regarding groundwater sampling).

3. **Grab Groundwater Sampling and Monitoring Well Installation.** It is not clear why both grab groundwater sampling and monitoring well installation are proposed for the same borings. The methods for collection of grab groundwater samples, whether grab groundwater samples are to be collected from separate borings, and procedures to prevent cross contamination of deeper grab groundwater samples are also not defined. ACEH requests that a response to comments be prepared to clarify when and how grab groundwater samples would be collected and when monitoring wells would be installed within a specific interval. ACEH requests that the screen intervals for monitoring wells installed below the shallow water table monitoring wells be specifically targeted to permeable zones. In most cases, the filter pack and screen intervals for monitoring wells screened below the water table should not exceed 5 feet in length. In no case, should the monitoring well screen intersect multiple water-bearing zones.
4. **Soil and Groundwater Analyses.** Please analyze all soil and groundwater samples collected during the site investigation for TPH as gasoline, TPH as diesel, MTBE, TAME, ETBE, DIPE, TBA, EDB, EDC, and ethanol.
5. **Estimate the MTBE Mass and Flux.** ACEH recommends that fate and transport modeling not be conducted until sufficient data have been collected to fully characterize the lateral and vertical extent of MTBE on and off the site.
6. **Quarterly Groundwater Monitoring.** The analytes for quarterly groundwater monitoring currently includes total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, BTEX, MTBE, TAME, ETBE, DIPE, and TBA. In addition to the above analytes, we request that analysis for EDB, EDC, and ethanol be performed on groundwater samples from all monitoring wells for the next two quarters, at a minimum. Include cumulative analytical data tables for these compounds (columns for both EPA Method 8020/21 and 8260 results) in your Quarterly Reports with ND results reported as a less than (<) the detection limit value. We request that you review the results of your analysis after the 2 quarters of monitoring and if any of the above compounds are detected at your site and are judged to be of concern (pose a risk to human health, the environment, or water resources), provide recommendations for incorporating these compounds into your regular monitoring schedule.

#### **TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **October 6, 2005** – Response to Agency Comments
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#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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**UNDERGROUND STORAGE TANK CLEANUP FUND**

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

**AGENCY OVERSIGHT**

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If you have any questions, please call me at (510) 567-6791.

Sincerely,



Jerry Wickham  
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Jim Ho  
Clearwater Group  
229 Tewksbury Avenue  
Point Richmond, CA 94801

Donna Drogos, ACEH  
Jerry Wickham, ACEH  
File

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES

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June 24, 2005

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis Street  
Fremont, CA 94538

Subject: Fuel Leak Case No. RO0000096, Eagle Gas, 4301 San Leandro Street, Oakland, CA 94601

Dear Ms. Naz:

Alameda County Environmental Health (ACEH) staff has reviewed correspondence received from Clearwater Group regarding "Recommendations for Interim Remedial Actions," dated June 13, 2005. The correspondence suggests that interim remediation be implemented before or together with the investigation activities requested by ACEH in a letter dated May 26, 2005. Figures 1 and 2, which were attached to the June 13, 2005 correspondence, showed proposed locations for groundwater extraction wells and oxygen diffusion iSoc wells, respectively. Please note that the ACEH letter dated May 26, 2005 requested that interim remediation be implemented at the site. ACEH has no objection to implementation of the proposed groundwater extraction well and oxygen diffusion iSOC well locations prior to implementing the investigation requested in ACEH's May 26, 2005 correspondence. However, the proposed operation of the interim remediation system and the proposed verification sampling for the interim remediation system are to be fully described in the Work Plan requested below.

Please note that all work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party as described in the section entitled "Perjury Statement," below. The June 13, 2005 correspondence from Clearwater Group and the most recent report entitled, "Quarterly Groundwater Monitoring Report - Second Quarter 2005," did not include cover letters from you.

**TECHNICAL REPORT REQUEST**

As previously requested in our May 26, 2005 correspondence, please submit technical reports to Alameda County Environmental Health (Attention: Mr. Jerry Wickham), according to the following schedule:

- **August 10, 2005** - Work Plan for Soil and Groundwater Investigation and Interim Remedial Action with initial SCM
- **120 days after ACEH approval of Work Plan** - Soil and Groundwater Investigation Report (to include interim remediation start-up report)
- **60 days after ACEH comments on the Soil and Groundwater Investigation Report** - Corrective Action Plan

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



SENT  
5-27-05

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FAX (510) 337-9335

May 26, 2005

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis Street  
Fremont, CA 94538

Dear Ms. Naz:

Subject: Fuel Leak Case No. RO0000096, Eagle Gas, 4301 San Leandro Street, Oakland, CA 94601

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the subject site and two reports, the "Interim Remedial Action Plan," dated June 16, 2004, prepared by Clearwater Group and the "Groundwater Monitoring Report, First Quarter, 2005," dated March 14, 2005, also prepared by Clearwater Group. The Interim Remedial Action Plan (IRAP) proposed the installation of approximately nine groundwater monitoring wells at the site. The IRAP also discussed potential remediation methods and proposed enhanced bioremediation through the use of an oxygen infusion system for groundwater treatment at the site. The oxygen infusion system would utilize the proposed nine additional on-site monitoring wells and three existing on-site monitoring wells to inject oxygen into the groundwater.

The Groundwater Monitoring Report, First Quarter 2005 presented the results of groundwater sampling conducted in February, 2005 and recommended the following:

- An additional on-site and off-site subsurface investigation that would include continuous coring.
- Implementation of an interim site remediation program.
- Groundwater monitoring of existing wells on a quarterly basis.

We are concerned with the high levels of petroleum products and associated blending compounds and additives in soil and groundwater at the site. We are also concerned with off-site migration of the groundwater contaminant plume and the lack of sufficient data to appropriately characterize your site. This letter presents a request for full three-dimensional definition, investigation, and a proposal for cleanup of soil and groundwater contamination from the unauthorized release at your site. You are hereby required to complete a Soil and Groundwater Investigation, conduct an interim remedial action, and prepare a Corrective Action Plan (CAP) for the subject site in accordance with California Code of Regulations 23 CCR, Section 2720 – 2728; State Water Resources Control Board Resolution 92-49, "Policies and Procedures for Investigation, Cleanup and Abatement of discharges Under Water Code Section 13304"; and within the Regional Water Quality Control Board (Water Board) Water Quality Control Plan for the basin.

The following technical comments address investigation and cleanup performance objectives that shall be considered as part of the required Soil and Water Investigation and CAP. **We request**

**that you prepare and submit a work plan for the Soil and Water Investigation by August 10, 2005, that addresses each of the following technical directives.**

Note, the California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately-registered or certified professional. All work performed for your site, including field work, is required to be designed, interpreted, and overseen by the appropriately registered professional.

Based on ACEH staff review of the documents referenced above, we request that you address the following technical comments, perform the proposed work, and send us the reports described below.

### **TECHNICAL COMMENTS**

#### **1. Regional Geologic and Hydrogeologic Study**

The purpose of a regional geologic and hydrogeologic study is to identify the geologic and hydrogeologic setting in the vicinity of your site. This data is then used to develop your initial Site Conceptual Model (SCM) requested below, and determine the appropriate scope of investigation activities.

We request that you provide information on the regional geologic and hydrogeologic setting of your site by reviewing the available technical literature for the area. Background information for your review includes but is not limited to regional geologic maps, United States Geological Survey (USGS) technical reports and documents, Department of Water Resources (DWR) Bulletins, Regional Water Quality Control Board reports on the groundwater basin, data from contaminant investigations in the area, etc.

Provide a narrative discussion of the regional geologic and hydrogeologic setting obtained from your background study. Use photocopies of regional geologic maps, groundwater contours, cross-sections, etc., to illustrate your results and include a list of technical references you reviewed (reference Technical Comment #5 below). Report your results as part of your SCM in the Work Plan requested below.

#### **2. Preferential Pathway Study**

A Sensitive Receptor Survey was conducted for the site and provided in a report entitled, "Groundwater Monitoring Report, Second Quarter 2001, Sensitive Receptor Survey and Workplan for Continuing Investigation," dated August 3, 2001. We request that this information be supplemented and incorporated into the work plan requested below. The Sensitive Receptor Survey did not provide maps showing the utilities that could potentially act as preferential pathways and did not show the locations of wells within ½ mile of the site. The results of your study shall contain all information required by 23 CCR, Section 2654(b). Please supplement the Sensitive Receptor Survey previously performed for the site to include the following information:



**a) Utility Survey**

An evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Submittal of map(s) and cross-sections showing the location and depth of all utility lines and trenches within and near the site and plume area(s) is required as part of your study.

**b) Well Survey**

The preferential pathway study shall include a well survey of all wells (monitoring and production wells: active, inactive, standby, decommissioned (sealed with concrete), abandoned (improperly decommissioned or lost); and dewatering, drainage, and cathodic protection wells) within a 1/2-mile radius of the subject site. Please review historical maps such as Sanborn maps, aerial photos, etc., when performing the background study. Submittal of map(s) showing the location of all wells identified in your study, and the use of tables to report the data collected as part of your survey are required. Include appropriate prints of historic aerial photos used as part of your study. We also request that you list by date all aerial photographs available for the site from the aerial survey company or library you use during your study. Please refer to the Regional Board's guidance for identification, location, and evaluation of potential deep well conduits when conducting your preferential pathway study.

**3. Characterization of Lateral and Vertical Extent of Contamination.**

The three-dimensional extent of soil and groundwater contamination at your site has not been defined. The results of recent groundwater monitoring at the site indicate the presence of high levels of methyl tert-butyl ether (MTBE) and other petroleum products in groundwater at your site. Concentrations up to 630,000 micrograms per liter ( $\mu\text{g/L}$ ) of MTBE and 160,000  $\mu\text{g/L}$  of tert butyl alcohol (TBA) were detected in groundwater during the February 2005 groundwater monitoring event. The concentrations of total petroleum hydrocarbons as gasoline (TPHg) and benzene could not be quantified due to the effects of such high concentrations of MTBE on the laboratory analyses. Soil sample results indicate that up 320 milligrams per kilogram (mg/kg) of MTBE, up to 4,300 mg/kg of TPHg, and up to 11 mg/kg of benzene have been detected in soil at your site. We agree with the recommendation by your consultant (Clearwater) presented in the First Quarter 2005 Groundwater Monitoring Report that an additional on-site and off-site subsurface investigation should be performed.

We request that you perform a detailed, expedited site assessment using depth discrete sampling techniques on borings installed along transects, to the extent practicable, to define and quantify the full three-dimensional extent of fuel contamination in soil and groundwater.

The on-site investigation should include additional characterization of the source area. Approximately 750 tons of petroleum-impacted soil was excavated and removed from the site in 1999. However, further characterization of the source area is required to determine the nature and extent of free product (liquid phase), petroleum-saturated soils (residual phase), and high concentrations of fuel constituents in soil vapor (vapor phase) that will continue to increase the mass of the dissolved phase contaminant plume. Contaminant source characterization also includes characterization of dissolved phase contamination and an estimation of contaminant mass in the source area. We request that source area characterization be initiated at the start of the on-site investigation. Source area characterization and contaminant mass estimations are

needed to define the scope and aggressiveness of interim source area cleanup and/or dissolved phase mass removal. Please provide your proposal for source characterization in the work plan requested below.

The chemical and physical properties of MTBE should be considered in planning the on-site and off-site subsurface investigation. MTBE is highly soluble, very mobile in groundwater, and is not readily biodegradable. Conventional monitoring wells currently installed at fuel leak sites are generally insufficient to properly locate and define the extent of MTE plumes. MTBE plumes can be long, narrow, and erratic (meandering). Thus, the positioning of typical monitoring well networks for UST releases can miss the MTBE plume core, and the monitoring well's design can incorrectly reflect the severity of the release.

A substantial portion of the soil and groundwater contamination should be defined during one mobilization by using expedited site assessment techniques at your site. The appropriately-qualified professionals performing field work at your site should use the data obtained from the field work to refine the initial three-dimensional conceptual model of site conditions developed from existing site information. Using expedited site assessment techniques, the appropriately-qualified professionals are to analyze the field data as it is collected, refine the conceptual model as new data is produced and evaluated, and modify the sampling and analysis program as needed to fill data gaps and resolve anomalies prior to demobilization.

Expedited site assessment tools and methods are a scientifically valid and cost-effective approach to fully define the three-dimensional extent of the plume. Technical protocol for expedited site assessments are provided in the U.S. Environmental Protection Agency's (EPA) "Expedited Site Assessment Tools for Underground Storage Tank Sites: A Guide for Regulators" (EPA 510-B-97-001), dated March 1997.

Please submit a detailed work plan detailing your proposal to fully characterize the lateral and vertical extent of soil and groundwater contamination. The work plan should be prepared by a qualified professional. The work plan must fully describe the proposed scope and methods for the soil and groundwater investigation.

We request that you immediately pursue off-site access agreements that you will need to complete your investigation activities.

#### **4. Characterization of Local Hydrogeology and Groundwater Flow Conditions.**

The purpose of this characterization is to understand the physical and geochemical characteristics of the subsurface, which may affect groundwater flow, the breakdown (fate), migration (transport), and the distribution of contaminants through the subsurface. Additionally, factors such as water level fluctuations, gradient changes, local hydrogeology, groundwater extraction, and groundwater recharge activities (natural and artificial) can significantly alter groundwater flow conditions.

The local hydrogeology and hydraulic gradient have not been sufficiently defined at the site. Therefore, we request that you collect detailed lithologic information using soil borings, direct push sampling, and/or cone penetrometer together with other methods to understand the hydrogeology of your site. We agree with the recommendation of your consultant that borings should be continuously cored. The use of additional methods to understand the hydrogeology, such as pumping tests, geophysical methods, etc. may be proposed.

Additional monitoring wells will be needed on-site and off-site to provide groundwater elevation data to be used in estimating the direction and magnitude of the hydraulic gradient. The additional monitoring wells should be installed as part of or following the expedited site assessment described in item 1 above. Please see the discussion in item 7 regarding the requirements for contaminant plume monitoring and monitoring well design.

We require that detailed boring logs, cross sections, and rose diagrams for hydraulic gradient be prepared and presented in the Soil and Groundwater Investigation Report. Rose diagrams showing the variations in hydraulic gradient shall be plotted on groundwater contour maps and updated in all future reports submitted for your site. Include plots of the contaminant plumes on your maps, cross sections, and diagrams. Structural contours, isopachs, and fence diagrams should be presented where necessary, to illustrate the three-dimensional distribution of contaminants in the subsurface.

The IRAP indicates that a brief step-drawdown test will be performed on well MW-2. We agree that step drawdown tests should be performed but request that step-drawdown tests be performed on a minimum of two on-site wells to be installed in the northeastern or eastern portion of the site for groundwater monitoring, rather than well MW-2.

The results of the on-site and off-site subsurface investigation, including the expedited site assessment, should be presented in the Soil and Groundwater Investigation Report, which is requested below.

##### **5. Project Approach and Investigation Reporting**

We anticipate that characterization and remediation work in addition to what is requested in this letter will be necessary at and downgradient from your site. Considerable cost savings can be realized if your consultant focuses on developing and refining a viable Site Conceptual Model (SCM) for the project. A SCM is a set of working hypotheses pertaining to all aspects of the contaminant release, including site geology, hydrogeology, release history, residual and dissolved contamination, attenuation mechanisms, pathways to nearby receptors, and likely magnitude of potential impacts to receptors. The SCM is used to identify data gaps that are subsequently filled as the investigation proceeds. As the data gaps are filled, the working hypotheses are modified, and the overall SCM is refined and strengthened. Subsurface investigations continue until the SCM no longer changes as new data are collected. At this point, the SCM is said to be "validated." The validated SCM then forms the foundation for developing the most cost-effective corrective action plan to protect existing and potential receptors.

When performed properly, the process of developing, refining and ultimately validating the SCM effectively guides the scope of the entire site investigation. We have identified, based on our review of existing data, some initial key data gaps in this letter and have described several tasks that we believe will provide important new data to refine the SCM. We request that your consultant develop a SCM for this site, identify data gaps, and propose specific supplemental tasks for future investigations. There may need to be additional phases of investigations, each building on the results of the prior work, to validate the SCM. Characterizing the site in this way will improve the efficiency of the work and limit its overall cost.

The SCM approach is endorsed by both industry and the regulatory community. Technical guidance for developing SCMs is presented in API's Publication No. 4699 and EPA's Publication No. EPA 510-B-97-001 both referenced above; and "Guidelines for Investigation and Cleanup of MTBE and Other Ether-Based Oxygenates, Appendix C," prepared by the State Water Resources Control Board, dated March 27, 2000.

The SCM for this project shall incorporate, but not be limited to, the following:

- a) A concise narrative discussion of the regional geologic and hydrogeologic setting obtained from your background study. Include a list of technical references you reviewed, and copies (photocopies are sufficient) of regional geologic maps, groundwater contours, cross-sections, etc.
- b) A concise discussion of the on-site and off-site geology, hydrogeology, release history, source zone, plume development and migration, attenuation mechanisms, preferential pathways, and potential threat to downgradient and above-ground receptors. Be sure to include the vapor pathway in your analysis. Maximize the use of large-scale graphics (e.g., maps, cross-sections, contour maps, etc.) and conceptual diagrams to illustrate key points. Include structural contour maps (top of unit) and isopach maps to describe the geology at your site.
- c) Identification and listing of specific data gaps that require further investigation during subsequent phases of work.
- d) Proposed activities to investigate and fill data gaps identified above.
- e) The SCM shall include an analysis of the hydraulic flow system at and downgradient from the site. Include rose diagrams for groundwater gradients. The rose diagram shall be plotted on groundwater contour maps and updated in all future reports submitted for your site. Include an analysis of vertical hydraulic gradients. Note that these likely change due to seasonal precipitation and pumping.
- f) Temporal changes in the plume location and concentrations are also a key element of the SCM. In addition to providing a measure of the magnitude of the problem, these data are often useful to confirm details of the flow system inferred from the hydraulic head measurements. Include plots of the contaminant plumes on your maps, cross-sections, and diagrams.
- g) Other contaminant release sites exist in the vicinity of your site. Hydrogeologic and contaminant data from those sites may prove helpful in testing certain hypotheses for your SCM. Include a summary of work and technical findings from nearby release sites and incorporate the findings from nearby site investigations into your SCM.

Report the information discussed above in your initial SCM and include it in the Work Plan requested below. Include updates to your SCM in the Soil and Water Investigation (Results of Expedited Site Assessment) Report requested below.

## **6. Interim Remediation**

This section requests that you initiate interim remediation at your site. Please note that additional remediation may be required in the future based upon the results of additional investigation work at and near your site.

- a) **Source Removal.** The purpose of the interim source removal is to remove the ongoing source(s) that is continuing to add mass to the plume and immediately begin removal of contaminant mass in the source area.

Interim remediation is necessary to reduce the ultimate impact of the unauthorized release by limiting continued growth and migration of the contaminant plume, and reduce overall cleanup costs. We request that interim remediation be performed following contaminant source characterization. The interim remediation should be conducted on site in the source area and may include a pilot study using the oxygen infusion system as proposed in the IRAP. The IRAP should include a discussion of the effectiveness of enhanced biodegradation using oxygen infusion based on the site-specific conditions. Specifically, the effects of high concentrations of TPHg and other additives and oxygenates on the aerobic degradation of MTBE should be evaluated. Groundwater monitoring wells that will not be used for oxygen infusion should be installed in order to monitor the effectiveness of the remediation within the plume at selected distances from the oxygen infusion wells.

Please report the results of the interim remediation in the Soil and Groundwater Investigation Report. Please document the progress of your interim remediation in the Quarterly Reports requested below.

- b) **Near-Source Plume Control.** The purpose of migration control is to prevent continued creation of a dissolved contaminant plume. The results of the off-site subsurface investigation and step-drawdown tests should be used to evaluate the need for migration control. Please include an evaluation of the need for and feasibility of migration control in the Soil and Groundwater Investigation Report requested below.

## **7. Date of Unauthorized Release**

The purpose of dating the unauthorized release is to assist in the determination of the rate of transport of MTBE and other petroleum hydrocarbons in groundwater. Please determine the approximate time frame of the MTBE release first occurring at your site, the history of MTBE use at your site, and the history of all unauthorized releases and spills at your site. Using chromatographs from previously analyzed samples, the laboratory should be able to quantify the level of MTBE present during previous sampling events. Report your findings in the Soil and Water Investigation (Results of Expedited Site Assessment) report requested below.

## **8. Estimation of MTBE Contaminant Mass Flux**

The purpose of estimating contaminant mass flux is to determine the contaminant mass that is moving through the subsurface over time relative to a known transect (e.g., a property boundary). This can provide an approximate estimate of the potential threat or nuisance to a receptor, and possible attenuation (degradation) of the plume.

We request that you consider approaches to estimating the MTBE contaminant mass flux using plume transects or fences located perpendicular to the MTBE plume. Please refer to the following guidance documents regarding mass flux estimates: API Publication No. 4730 and the ChevronTexaco document dated June 2002, both referenced above. We recommend the use of expedited site assessment tools and/or appropriately-screened monitoring wells (sand pack for the screened intervals not greater than 5' in length) to provide data for these estimates. In deciding the location of transects and developing mass flux estimates, please consider the variable dissolution of MTBE from the source. Please report your results in the Soil and Water Investigation (Results of Expedited Site Assessment) Report requested below.

#### **9. Groundwater Contaminant Plume Monitoring**

The purpose of groundwater contaminant plume monitoring is to determine the three-dimensional movement of the plume, the rate of plume growth, and the effectiveness of remediation activities.

Once the extent of the plume(s) is defined, we request that you install permanent monitoring wells capable of monitoring depth discrete zones and/or monitoring well clusters (screened at appropriate discrete depths with appropriate length of screen) and piezometers to monitor the three-dimensional movement of the plume. We request that you use the detailed cross sections, structural contours, isopachs, and rose diagrams for groundwater gradient developed for Technical Comment 4 above, to determine the appropriate locations and designs for monitoring wells/well clusters and piezometers that are needed to appropriately monitor the three-dimensional movement of the plume. To appropriately evaluate your site, your monitoring wells/well clusters will need to be screened in the permeable zones with screen lengths that match the stratigraphic sequence. Sand pack for these screened intervals will not be greater than 5 feet in length. The number of piezometer/wells should be sufficient to evaluate all permeable zones.

Include your proposal for the installation of wells/piezometers in the work plan requested below. We request that wells be installed in transects. Please refer to the guidance document by API Publication No. 4730 referenced above regarding transects. We recommend that you submit your proposal for the installation of monitoring wells/well clusters and piezometers to ACEH for comment prior to installation. Report on the installation of wells/piezometers in the Soil and Water Investigation (Results of Expedited Site Assessment) Report and the Soil and Water Investigation Completion Report.

We request that you monitor the groundwater contaminant plumes on a quarterly basis. Additional wells will be required to define the downgradient extent of the plume if it continues to migrate. Discuss the results of your plume monitoring in the Quarterly Reports requested below. Discuss the results of your plume monitoring in the Quarterly Reports requested below. Please compile your monitoring data on cross-sections, include groundwater contours, and rose diagrams for groundwater gradient. We require that Quarterly Reports contain a discussion of the results of your plume monitoring, in particular whether the results are consistent with the SCM. Be sure to point out any anomalies in the data, and include recommended activities to investigate and resolve those data anomalies.

We request that you perform an EPA Method 8260 analysis for BTEX, MTBE, TAME, ETBE, DIPE, TBA, EDB, and EDC on groundwater samples from all monitoring wells for the next two quarters, at a minimum. Include cumulative analytical data tables for these compounds (columns

for both EPA Method 8020/21 and 8260 results) in your Quarterly Reports with ND results reported as a less than (<) the detection limit value. We request that you review the results of your analysis after the 2 quarters of monitoring and if any of the above compounds are detected at your site and are judged to be of concern (pose a risk to human health, the environment, or water resources), provide recommendations for incorporating these compounds into your regular monitoring schedule. Also, we request that site maps included in future reports for the site show the locations of all current and former USTs, dispenser islands, monitoring wells, and soil borings.

#### **10. Corrective Action Plan**

The purpose of the CAP is to use the information obtained during investigation activities to propose cost-effective final cleanup objectives for the entire contaminant plume and remedial alternatives for soil and groundwater that will adequately protect human health and safety, the environment, eliminate nuisance conditions, and protect water resources.

Please submit a Corrective Action Plan (CAP) for the final cleanup of contamination in soil and groundwater at your site by the date specified below. The CAP should be based on the results of the on-site and off-site subsurface investigation and interim remediation. The CAP must address at least three technically and economically feasible methods to restore and protect beneficial uses of groundwater and to meet the cleanup objective for each contaminant established in the CAP. The CAP must propose verification monitoring to confirm completion of corrective actions and evaluate CAP implementation effectiveness.

#### **11. GeoTracker EDF Submittals**

A review of the case file and the State Water Resources Control Board's (SWRCB) GeoTracker website indicate that electronic copies of analytical data have not been submitted for your site. Pursuant to CCR Sections 2729 and 2729.1, beginning September 1, 2001, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the LUFT program, must be transmitted electronically to the SWRCB GeoTracker system via the internet. Additionally, beginning January 1, 2002, all permanent monitoring points utilized to collect groundwater samples (i.e. monitoring wells) and submitted in a report to a regulatory agency, must be surveyed (top of casing) to mean sea level and latitude and longitude to sub-meter accuracy, using NAD 83, and transmitted electronically to the SWRCB GeoTracker system via the internet.

In order to remain in regulatory compliance, please upload all analytical data (collected on or after September 1, 2001), to the SWRCB's GeoTracker database website in accordance with the above-cited regulation. **Please perform the electronic submittals for applicable data and submit verification to this Agency by June 30, 2005.**

#### **TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Jerry Wickham), according to the following schedule:

- **June 30, 2005** - Quarterly Report for the Second Quarter 2005

- **August 10, 2005** - Work Plan for Soil and Groundwater Investigation and Interim Remedial Action with initial SCM
- **120 days after ACEH approval of Work Plan** – Soil and Groundwater Investigation Report (to include interim remediation start-up report)
- **60 days after ACEH comments on the Soil and Groundwater Investigation Report** - Corrective Action Plan
- **September 30, 2005** - Quarterly Report for the Third Quarter 2005
- **December 30, 2005** - Quarterly Report for the Fourth Quarter 2005

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### **PERJURY STATEMENT**

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

#### **PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS**

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

#### **UNDERGROUND STORAGE TANK CLEANUP FUND**

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

#### **AGENCY OVERSIGHT**

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including

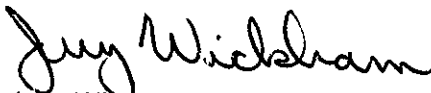


Ms. Farah Naz  
May 26, 2005  
Page 11

the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,



Jerry Wickham, P.G.  
Hazardous Materials Specialist

cc: Mr. David Mog  
Clearwater Group  
229 Tewksbury Avenue  
Point Richmond, CA 94801

Donna Drogos, ACEH

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



10-19-01

October 18, 2001  
StID 2118/ RO0000096

Ms. Farah Naz c/o  
Mr. Muhammed Jamil  
40092 Davis St.  
Fremont, CA 94538

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

**Re: Groundwater Monitoring Report, Sensitive Receptor Survey and Workplan for  
Continuing Investigation, Eagle Gas Station, 4301 San Leandro St., Oakland  
94601**

Dear Ms. Naz:

Our office has received and reviewed the August 3, 2001 referenced report prepared by Clearwater Group, Inc., your consultant. The following observations were made from the monitoring report:

- Elevated gasoline, diesel and MTBE are found in all three wells. These levels require some type of interim remediation.
- Groundwater elevation in MW-1 is significantly higher than in the other two wells accounting for the unexpected easterly groundwater gradient. Apparently redeveloping the wells did not correct the groundwater elevation problem.
- Semi-volatiles were not found (with the exception of 6 ppb naphthalene) in MW-2 and therefore may be omitted in future monitoring. Quarterly monitoring should continue at this site.

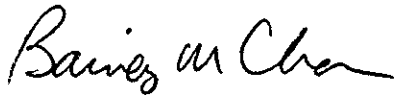
The sensitive receptor survey did not identify any surface water, homes with basements or drinking water wells that could likely be impacted by the fuel release. The one industrial well along High St. is screened below 170 feet and is therefore not likely to be impacted. The only utilities that could be impacted are sewer lines running along High St. to the northwest. These may need to be investigated once the groundwater gradient is confirmed.

This report includes a proposal to install eight additional off-site monitoring wells to determine the extent of contamination and verify gradient. At this time, our office does not recommend installing these wells because the site has not been adequately characterized on-site. We recommend additional on-site wells be installed to help clarify the groundwater gradient prior to proposing strategic off-site well installations. Please have your consultant submit their recommended on-site well locations. In addition, please investigate whether the underground storage tank pit can be used for collection and treatment of groundwater.

Ms. Farah Naz  
Eagle Gas  
4301 San Leandro St., Oakland 9460  
October 18, 2001  
Page 2

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. B. Gwinn, Clearwater Group, Inc., 520 Third St., Suite 104, Oakland CA 94607

Onsite 4301 San Leandro St.

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



05-11-01

R096

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

May 10, 2001  
StID # 2118

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

**Re: Subsurface Investigation at Eagle Gas, 4301 San Leandro St., Oakland CA 94601**

Dear Ms. Naz:

Our office has received and reviewed the **April 30, 2001 Groundwater Monitoring Report, First Quarter 2001** for the above referenced site as prepared by Clearwater Group, Inc., your consultant. The results of this monitoring event indicate comparable and higher petroleum contamination than the previous sampling event in October 2000. This might be attributed to the large difference in groundwater elevation observed in these wells. Clearwater recommends additional site investigation to delineate the extent of the contamination and to determine the amount of residual contamination onsite. Apparently, Clearwater is seeking access to adjacent and surrounding properties to determine locations for borings and/or monitoring wells.

Since site conditions have worsened since the last monitoring event, the items previously requested in my November 3, 2000 letter (copy enclosed) are still warranted. As stated in that letter, please have your consultant perform a utility and sensitive receptor survey within a 2000' radius of this site. The elevated MTBE in groundwater requires that such a survey be done. Groundwater gradient continues to be very unusual. There continues to be large differences in groundwater elevation in the wells resulting in a steep gradient. It is likely that additional on-site wells, necessary for residual contamination determination, may show that some of the existing wells should not be included in gradient determination. Please have your consultant provide a work plan for additional on-site investigation and include the installation of at least one additional monitoring well. Your next monitoring event should include the analysis for PAHs (polyaromatic hydrocarbons) in MW2 as requested in my prior letter.

The elevated MTBE concentrations in groundwater will require remediation. Please have your consultant provide a feasibility study to evaluate potential remediation alternatives. The exact design and location of remediation equipment should be proposed after the site has been better characterized.

**Please provide your sensitive receptor survey, work plan for additional on-site characterization and remediation feasibility study along with your next quarterly monitoring report. These technical reports should be submitted within 60 days or no later than July 10, 2001.**

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
4301 San Leandro St., Oakland 94601  
May 10, 2001  
StID # 2118  
Page 2

You may contact me at (510) 567-6765 if you have any questions or comments.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

Enclosure (Ms. Naz)

C: B. Chan, files

Mr. B. Gwinn, Clearwater Group, 520 Third St., Suite 104, Oakland CA 94607

Mr. H. Gomez, City of Oakland Fire Services, 1605 MLK Jr. Way, Oakland CA 94612

Rprq4301SanLeandroSt

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



11-3-00

2096

November 3, 2000  
StID # 2118

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

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

**Re: Well Installation and Groundwater Monitoring Report for Eagle Gas,  
4301 San Leandro St., Oakland CA 94601**

Dear Ms. Naz:

Our office has received and reviewed the October 31, 2000 Clearwater Group, Inc. (Clearwater) report referenced above. As you are aware, this report gives the findings of the installation and sampling of three monitoring wells installed in late September 2000. This investigation is being done in stages to spread out your financial impact.

The results of the investigation were consistent with the results of the previous samples taken during the tank and piping removals. Even though the monitoring wells were located at three of the four corners of the site, considerable soil and groundwater contamination was found.

Our office has the following comments to your consultant's conclusions and recommendations:

- Clearwater states that the groundwater contaminant plume has not been delineated and additional investigation will be required. Our office agrees that in the future, additional groundwater investigation will be required, likely off-site. **Prior to performing any off-site investigation, you are requested to perform a utility and sensitive receptor survey. Because of the unreliable groundwater gradient, please survey a radius of 2000 feet around your site.**
- Clearwater observed a significant difference in groundwater elevation among the three wells. This resulted in reporting a steep gradient in the northeast direction, opposite of what might be expected. Our office does not believe this data reflects the actual site conditions. It is unreasonable to observe such large differences in groundwater elevation in wells so close to each other at a homogenous site. **We agree with your consultant's suggestion to redevelop the wells until similar recharge rates are observed and hopefully more reasonable groundwater elevations.** Although the former tank pit might cause unexpected changes in groundwater elevation, you'd expect wells, MW-1 and MW-2 to be affected, which is not seen.
- Our office concurs with continued quarterly groundwater monitoring at the site. Because of the detection of polyaromatic hydrocarbons (PAHs) in grab groundwater sample GW3, please analyze MW2 for PAHs during your next monitoring event in addition to the other parameters.

Ms. Farah Naz  
4301 San Leandro St., Oakland  
November 3, 2000  
StID # 2118  
Page 2

- The elevated TPHg and MTBE concentration in groundwater are a potential problem that may require active remediation. Since the highest concentrations appear to be within the former tank pit, please verify the nature of the fill material in the former tank pit. Would the permeable back-fill allow treatment of this impacted area?
- After completing your receptor and preferential pathway survey, please be prepared to evaluate risk both off and on-site.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Ms. J. Fox, Clearwater Group, 520 Third St., Suite 104, Oakland CA 94607  
Mr. H. Gomez, City of Oakland Fire Services, 1605 MLK Jr. Dr., Oakland 94607

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ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



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

November 3, 2000  
StID # 2118

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

Re: Well Installation and Groundwater Monitoring Report for Eagle Gas,  
4301 San Leandro St., Oakland CA 94601

Dear Ms. Naz:

Our office has received and reviewed the October 31, 2000 Clearwater Group, Inc. (Clearwater) report referenced above. As you are aware, this report gives the findings of the installation and sampling of three monitoring wells installed in late September 2000. This investigation is being done in stages to spread out your financial impact.

The results of the investigation were consistent with the results of the previous samples taken during the tank and piping removals. Even though the monitoring wells were located at three of the four corners of the site, considerable soil and groundwater contamination was found.

Our office has the following comments to your consultant's conclusions and recommendations:

- Clearwater states that the groundwater contaminant plume has not been delineated and additional investigation will be required. Our office agrees that in the future, additional groundwater investigation will be required, likely off-site. **Prior to performing any off-site investigation, you are requested to perform a utility and sensitive receptor survey. Because of the unreliable groundwater gradient, please survey a radius of 2000 feet around your site.**
- Clearwater observed a significant difference in groundwater elevation among the three wells. This resulted in reporting a steep gradient in the northeast direction, opposite of what might be expected. Our office does not believe this data reflects the actual site conditions. It is unreasonable to observe such large differences in groundwater elevation in wells so close to each other at a homogenous site. **We agree with your consultant's suggestion to redevelop the wells until similar recharge rates are observed and hopefully more reasonable groundwater elevations.** Although the former tank pit might cause unexpected changes in groundwater elevation, you'd expect wells, MW-1 and MW-2 to be affected, which is not seen.
- Our office concurs with continued quarterly groundwater monitoring at the site. Because of the detection of polyaromatic hydrocarbons (PAHs) in grab groundwater sample GW3, please analyze MW2 for PAHs during your next monitoring event in addition to the other parameters.

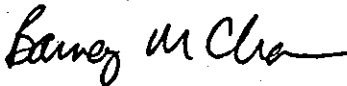


Ms. Farah Naz  
4301 San Leandro St., Oakland  
November 3, 2000  
StID # 2118  
Page 2

- The elevated TPHg and MTBE concentration in groundwater are a potential problem that may require active remediation. Since the highest concentrations appear to be within the former tank pit, please verify the nature of the fill material in the former tank pit. Would the permeable back-fill allow treatment of this impacted area?
- After completing your receptor and preferential pathway survey, please be prepared to evaluate risk both off and on-site.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

✓ C: B. Chan, files

Ms. J. Fox, Clearwater Group, 520 Third St., Suite 104, Oakland CA 94607

Mr. H. Gomez, City of Oakland Fire Services, 1605 MLK Jr. Dr., Oakland 94607

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ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



SENT 8 31 00

RO# 96

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

August 30, 2000  
StID # 2118

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

**Re: Subsurface Investigation at Eagle Gas, 4301 San Leandro St., Oakland CA 94601**

Dear Ms. Naz:

This letter serves as a reminder of your requirements for performing a subsurface investigation at the above referenced site. As you will recall, both the City of Oakland and Alameda County offices agree to allow you time to operate the newly installed fuel tanks and generate revenue prior to starting the required soil and groundwater investigation at this site. You were aware, however, that this was only temporarily suspension.

Our office has received a letter dated July 11, 2000 from Ms. Judi Fox of Clearwater Group providing a prospective timeline for actions at the site. Clearwater's proposal is somewhat unclear since it states that within 60 days of the Cleanup Fund's pre-approval, they will arrange the necessary field activities. **This is not an acceptable time schedule.** Please be reminded that you are required to start your investigation within six (6) months of receiving your operating permit for the underground tanks. **Accordingly, you should start the field activities by September 29, 2000.** The work may be done in stages as suggested by Clearwater. In addition, because Artesian Environmental has become Clearwater Group, a letter indicating this and any changes in the original work plan should be submitted to our office signed by the new lead registered professional. Please keep in mind that maintaining compliance with all prevailing underground tank requirements, including site investigation and remediation, is a condition of your underground tank operating permit. The City of Oakland may withdraw your operating permit for failure to perform this investigation.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Ms. J. Fox, Clearwater Group Inc., 520 Third St., Suite 104, Oakland CA 94607

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ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



SENT 11-2-99  
including cc's

2096

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

October 29, 1999  
StID # 2118

Kaur Gurdev  
757 Limerick Lane  
Alameda, CA 94501

**Re: Eagle Gas, 4301 San Leandro St., Oakland CA 94601**

Dear Kaur Gurdev:

Enclosed please find a copy of your Notice of Responsibility (NOR), which apparently was not sent to you originally due to a clerical error. This notice identifies you as the property owner and responsible party for the investigation and cleanup of the underground tank release at the above site. Should you have any questions or comments, please contact me at (510) 567-6765.

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

SENT including cc's  
10-29-99

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

2096

October 29, 1999  
STID # 2118

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

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

**RE: Eagle Gas, 4301 San Leandro St., Oakland CA 94601**

**LANDOWNER NOTIFICATION AND PARTICIPATION REQUIREMENTS**

Dear Mr. Jamil:

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, Ms. Farah Naz has 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.

LANDOWNER NOTIFICATION

Re: 4301 San Leandro St., Oakland CA 94601

October 29, 1999

Page 2 of 2

In accordance with Section 25297.15(a) of Ch. 6.7 of the Health & Safety Code, you must certify to the local agency that all current record owners of fee title to the site have been informed of the proposed action before the local agency may do any of the following:

- 1) consider a cleanup proposal (corrective action plan)
- 2) consider a site closure proposal
- 3) make a determination that no further action is required
- 4) issue a closure letter

You may use the enclosed "notice of proposed action" form (sample letter 3) as a template to comply with this requirement. Before approving a cleanup proposal or site closure proposal, determining that no further action is required, or issuing a closure letter, the local agency will take all reasonable steps necessary to accommodate responsible landowner participation in the cleanup and site closure process and will consider all input and recommendations from any responsible landowner.

Please call me at (510) 567-6765 should you have any questions about the content of this letter.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

Attachments

cc: Chuck Headlee, RWQCB

SAMPLE LETTER (2): LIST OF LANDOWNERS FORM

---

Name of local agency  
Street address  
City

SUBJECT: CERTIFIED LIST OF RECORD FEE TITLE OWNERS FOR (*Site Name and Address*)

(Note: Fill out item 1 if there are multiple site landowners. If you are the sole site landowner, skip item 1 and fill out item 2.)

1. In accordance with section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, I, (*name of primary responsible party*), certify that the following is a complete list of current record fee title owners and their mailing addresses for the above site:
  
2. In accordance with section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, I, (*name of primary responsible party*), certify that I am the sole landowner for the above site.

Sincerely,

Signature of primary responsible party

Name of primary responsible party

SAMPLE LETTER 3: NOTICE OF PROPOSED ACTION SUBMITTED TO LOCAL AGENCY

---

Name of local agency  
Street address  
City

SUBJECT: NOTICE OF PROPOSED ACTION SUBMITTED TO LOCAL AGENCY  
FOR *(Site Name and Address)*

In accordance with section 25297,15(a) of Chapter 6.7 of the Health & Safety Code, I, *(name of primary responsible party)*, certify that I have notified all responsible landowners of the enclosed proposed action. Check space for applicable proposed action(s):

- cleanup proposal (corrective action plan)
- site closure proposal
- local agency intention to make a determination that no further action is required
- local agency intention to issue a closure letter

Sincerely,

Signature of primary responsible party

Name of primary responsible party

cc: Names and addresses of all record fee title owners

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



September 15, 1999  
StID #2118

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

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

RO 96

**Re: Soil Remediation Pilot Study and Well Installation Workplan for Eagle Gas,  
4301 San Leandro St., Oakland CA 94601**

Dear Mr. Jamil:

Our office has received and reviewed the Artesian Environmental September 10, 1999 work plan referenced above. This work plan responds to my prior request for such actions before you proceed with the underground tank installations and permitting. It is necessary to perform as much site remediation as possible prior to installing your new underground tank system. This report provides specific details of a soil remediation pilot study to determine the effectiveness of chemical oxidation with peroxide and also proposes the installation of three monitoring wells to determine local groundwater quality.

Artesian has previously examined available technologies for this site and determined that chemical oxidation would be the most reasonable remediation approach. The pilot study will be performed in an area south of the existing building. A grid of borings will be advanced for the injection of the solution of hydrogen peroxide. Four locations have been designated where pre- and post-injection samples will be taken to measure the effectiveness of the remediation. It is hopeful that this remediation will be effective on all the petroleum released including MTBE, which is currently a difficult contaminant to handle. If this proves successful, I assume this approach will be extended to other areas at this site.

Our office also requested the installation of wells at this site to determine groundwater quality. Both the amount and extent of petroleum contamination is required, therefore, additional investigation and wells may be necessary. In addition, groundwater monitoring should be initiated on a quarterly schedule after well installation.

The work plan is approved. Please inform our office prior to performing this work. I may be reached at (510) 567-7665 if you have any questions.

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. P. Jones, Artesian Environmental, 229 Tewksbury Ave., Point Richmond, CA 94801

Wpap4301SLSt



ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



PO96

August 23, 1999  
StID # 2118

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

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

**Re: Soil and Groundwater Investigation at Eagle Gas, 4301 San Leandro St.,  
Oakland CA 94601**

Dear Ms. Naz:

Our office has received and reviewed the August 18, 1999 Artesian Environmental response to my August 13, 1999 letter. As you may recall, my letter requested that you consider what interim remedial actions could be done at the above site given the high residual methyl tertiary butyl ether (MTBE) concentrations left in soil. Another question is whether any remediation should take place prior to underground tank installation.

The Artesian response evaluates the following options for remediation:

- Soil vapor extraction
- Assisted natural attenuation and
- Chemical oxidation.

These remediation options were evaluated under site specific circumstances that put a premium on cost, effectiveness, technical feasibility and the ability to evaluate the action quickly. Based on these constraints, it was determined that chemical oxidation may be the best remedial approach. Our office agrees with this approach along with these additional items mentioned in Artesian's letter:

- Two groundwater extraction wells should be installed within the tank pit prior to surfacing the site.
- A pilot test evaluating the effectiveness of chemical oxidation should be run immediately. If it proves effective, the perimeter of the tank pit, the former piping run and beneath the existing building should be considered for this treatment.
- Three monitoring wells should be installed to measure groundwater gradient and water quality impact.
- If the piping run cannot be treated by chemical oxidation, slotted piping will be installed in the piping trench for possible soil vapor extraction.

As long as these items are addressed, you may initiate underground tank installation. You may contact me at (510) 567-6765 if you have any questions or comments.

Ms. Farah Naz  
4301 San Leandro St., Oakland 94601  
StID # 2118  
August 23, 1999  
Page 2.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. P. Jones, Artesian Environmental, 229 Tewksbury Ave., Pt. Richmond, CA 94801  
Mr. H. Gomez, Oakland Fire Services Agency, 504 14<sup>th</sup> St., 7<sup>th</sup> Floor, Oakland CA 94612  
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ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



R096

August 23, 1999  
StID # 2118

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

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

**Re: Soil and Groundwater Investigation at Eagle Gas, 4301 San Leandro St.,  
Oakland CA 94601**

Dear Ms. Naz:

Our office has received and reviewed the August 18, 1999 Artesian Environmental response to my August 13, 1999 letter. As you may recall, my letter requested that you consider what interim remedial actions could be done at the above site given the high residual methyl tertiary butyl ether (MTBE) concentrations left in soil. Another question is whether any remediation should take place prior to underground tank installation.

The Artesian response evaluates the following options for remediation:

- Soil vapor extraction
- Assisted natural attenuation and
- Chemical oxidation.

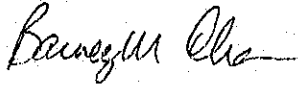
These remediation options were evaluated under site specific circumstances that put a premium on cost, effectiveness, technical feasibility and the ability to evaluate the action quickly. Based on these constraints, it was determined that chemical oxidation may be the best remedial approach. Our office agrees with this approach along with these additional items mentioned in Artesian's letter:

- Two groundwater extraction wells should be installed within the tank pit prior to surfacing the site.
- A pilot test evaluating the effectiveness of chemical oxidation should be run immediately. If it proves effective, the perimeter of the tank pit, the former piping run and beneath the existing building should be considered for this treatment.
- Three monitoring wells should be installed to measure groundwater gradient and water quality impact.
- If the piping run cannot be treated by chemical oxidation, slotted piping will be installed in the piping trench for possible soil vapor extraction.

As long as these items are addressed, you may initiate underground tank installation. You may contact me at (510) 567-6765 if you have any questions or comments.

Ms. Farah Naz  
4301 San Leandro St., Oakland 94601  
StID # 2118  
August 23, 1999  
Page 2.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. P. Jones, Artesian Environmental, 229 Tewksbury Ave., Pt. Richmond, CA 94801  
Mr. H. Gomez, Oakland Fire Services Agency, 504 14<sup>th</sup> St., 7<sup>th</sup> Floor, Oakland CA 94612  
3SWI4301SL

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



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ENVIRONMENTAL HEALTH SERVICES

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

August 13, 1999  
StID # 2118

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

**Re: Soil and Groundwater Investigation at Eagle Gas, 4301 San Leandro St.,  
Oakland 94601**

Dear Ms. Naz:

Our office has been working with Artesian Environmental Consultants (Artesian) in overseeing the investigation of soil and groundwater at the above site. As you may be aware, the former fuel tank pit was over-excavated. Our office has reviewed the analytical results of samples taken after this excavation and find that the concentrations of methyl tertiary butyl ether (MTBE) are extraordinarily high. Therefore, our office requests that you investigate what can be done within the existing tank pit and open trenches to aid in the remediation of MTBE. In addition, our office will require the installation of a minimum of three monitoring wells at this site to investigate groundwater quality.

Please respond to the above requests as soon as possible to expedite your tank installation job.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. P. Jones, Artesian Environmental, 229 Tewksbury Ave., Pt. Richmond, CA 94801  
Mr. H. Gomez, Oakland Fire Services Agency, 504 14<sup>th</sup> St., 7<sup>th</sup> Floor, Oakland CA 94612

2SW14301 San Leandro

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



2096

June 3, 1999  
StID # 2118

Ms. Farah Naz c/o  
Mr. Muhammad Jamil  
40092 Davis St.  
Fremont, CA 94538

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

**Re: Soil and Groundwater Remediation Work Plan for Eagle Gas, 4301 San Leandro St.,  
Oakland CA 94601**

Dear Mr. Jamil:

Our office has received and reviewed the May 26, 1999 soil and groundwater work plan as prepared by Artesian Environmental. This work plan responds to my May 10, 1999 letter recommending additional soil excavation and groundwater removal, if possible, due to the elevated concentrations of petroleum found in samples taken from the tank removal.

The work plan proposes, among other things:

- Excavation of petroleum impacted soil,
- Confirmation sidewall sampling after excavation,
- Pumping of encountered groundwater into an aboveground tank and the proper characterization and disposal of soil and groundwater.

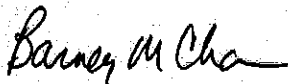
It is acknowledged that shoring may be needed to prevent caving and jeopardizing adjacent buildings. One soil sample will be collected for every 20 linear feet of wall excavation. Should groundwater be encountered, the soil sample should be collected just above groundwater. In addition, if groundwater is removed, additional groundwater samples may be taken after this removal. The exact number of samples is estimated as at least five (5) soil and five (5) groundwater, however, these numbers may vary. It appears that less than five groundwater samples will be needed, after purging the tank pit, however, additional samples will be required as necessary to characterize the soil and groundwater for proper disposal. The confirmation samples will be analyzed for total petroleum hydrocarbons as diesel (TPHd), total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethyl benzene and xylenes (BTEX), and methyl tertiary butyl ether (MTBE). Please run semi-volatile compounds, EPA Method 8270 on one of the groundwater samples.

This work plan is approved. Please notify our office prior to this work so someone can be present to witness the soil and groundwater sampling. In addition, you should complete the underground piping and dispenser soil sampling to identify any other areas, which may need over-excavation. You should contact the City of Oakland, Fire Services Agency to witness this sampling.

Mr. Muhammad Jamil  
StID # 2118  
4301 San Leandro St., Oakland 94601  
June 3, 1999  
Page 2.

You may contact me at (510) 567-6765 if you have any questions

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. P. Jones, Artesian Environmental, 229 Tewksbury Ave., Point Richmond, CA 94801

Mr. H. Gomez, City of Oakland Fire Services Agency, 504 14<sup>th</sup> St., 7<sup>th</sup> Floor, Oakland 94612

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ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

R0916

May 10, 1999  
StID # 2118

Mr. Farah Naz  
Eagle Gas  
4301 San Leandro St.  
Oakland CA 94601

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

**Re: Underground Storage Tank Removal at 4301 San Leandro St., Oakland CA 94601**

Dear Mr. Naz:

This letter is to inform you of our office's role in the investigation of the above referenced site upon the discovery of a release of petroleum hydrocarbon to soil and groundwater. Our office has been made aware of soil and groundwater analytical results from samples taken during the removal of the gasoline, diesel and waste oil tanks on 4/22/99. Because of these results, our office will take over the oversight of the required soil and groundwater investigation of the petroleum release. The City of Oakland Fire Services will continue to complete the supervision of soil and groundwater sampling and the installation and permitting of any new tanks.

You will be receiving shortly a letter notifying of this transfer of oversight. Our office recommends that you or your consultant apply to the Underground Storage Tank Cleanup Fund. This fund may help you in receiving partial reimbursement for money spent in investigating and remediating petroleum releases from underground tanks. The fund may be contacted at 1-800-813-3863.

Our office has been requested to provide guidance for this site given the results of the soil and groundwater samples. Having reviewed the analytical results, our office recommends the over-excavation of the tank pit with the exception of the area around UST #3, the 6,000 gallon tank. In addition, if possible, as much groundwater as possible should be removed and disposed to remove a source of petroleum contamination.

Please submit a copy of your final underground storage tank closure report to our office as well as the City of Oakland Fire Services.

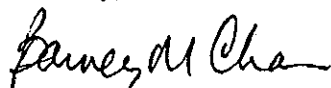
Enclosed please find a copy of an Underground Storage Tank Unauthorized Release (Leak) report to be completed by you or your consultant. Please return the complete form to our office **within 10 days of its receipt**. You should also be aware that at a minimum, a groundwater investigation will be required at this site.

You may contact me at (510) 567-6765 if you have any questions.



Mr. Farah Naz  
StID # 2118  
4301 San Leandro St., Oakland 94601  
May 10, 1999  
Page 2.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

Enclosure

C: B. Chan, files

Mr. H. Gomez, Oakland Fire Services Agency, 504 14<sup>th</sup> St., 7<sup>th</sup> Floor, Oakland CA 94612  
Mr. P. Jones, Artesian Environmental, 229 Tewksbury Ave., Pt. Richmond, CA 94801  
SWI-4301SanLeandro



Certified Mailer Number P 062 127 787

June 7, 1991

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

Mr. Abdul Ghaffar  
Eagle Gas  
4301 San Leandro Street  
Oakland, CA 94601

**NOTICE OF VIOLATION**

Dear Mr. Ghaffar:

On May 8, 1991, I stopped at your business, Eagle Gas Station, at 4301 San Leandro Street, Oakland. I left written instructions with the attendant for the appropriate person to contact our office to provide information regarding inventory reconciliation, pipeline leak detection, annual tank precision testing, and completion of a Hazardous Materials Management Plan. I specified that a Hazardous Materials Specialist be contacted within 7 working days.

On June 4, 1991, I contacted you at this address and conducted an inspection of your facility. At this time I gave you the Underground Storage Tank Permit Application Forms. This consisted of one Form A and four Form B applications. I also gave you a Hazardous Materials Management Plan (HMMP). I instructed you to complete these items and return them to my office within 15 working days of the date of my inspection.

You provided me with a copy of the latest tank precision test on four tanks, which is dated May 17, 1991. You also stated that Mr. Baljit Singh is the property owner, and provided me with his phone number.

I have enclosed a copy of the quarterly summary report that gasoline station operators are required to complete and submit to our office every three months. You should consider the front page a master copy, and copies should be made from this. Pages 2 through 4 outline the specific monitoring requirements that apply to your facility. This requires performing inventory reconciliation on a daily basis, testing the tanks annually, and equipping all pressurized pipelines with an automatic on-line pressure loss detector and flow restriction device.

To receive a permit to operate the tanks, you are to demonstrate that you are indeed in compliance with the operating requirements as outlined in California Code of Regulations, Title 23,

Mr. Abdul Ghaffar  
Eagle Gas  
June 7, 1991  
Page 2

Subchapter 16. This includes keeping all records on-site for three years, or at the very minimum available within 24 hours upon request by the local agency. You had no inventory reconciliation records available when I was present. According to Section 2712, you are also required to keep records of all testing of tanks and piping, and any other tank monitoring information on-site for three years.

At the time of my inspection I requested you to send me a copy of the 1990 precision test for the four tanks, Inventory Reconciliation records for May 1991, and a copy of the 1991 line leak detection system test after it has been done. Please send a copy of the precision test and reconciliation records within 30 days of the date of this letter. The piping test is to be submitted within 10 days after you have received the results.

Please note that this business was inspected by a representative from our office in **August 1988**. Your signature is on that inspection form. The items you were to comply with at that time include: submitting a copy of the last tank test to our office and performing inventory reconciliation. In addition, you were to dispose of three drums of waste oil and provide our office with a copy of the disposal receipt. These items were never addressed. In fact, I observed these same drums during my inspection. **Within 30 days of the date of this letter**, you are to submit to my office a receipt for removal of those drums.

The California Health and Safety Code, Division 20, Section 25299 allows for fines of up to \$5,000 dollars per day for each tank not in compliance with state regulations. This applies equally to the operator and the owner. In addition, Section 2640 (a) of Title 23 allows for the local agency to require tank closure if the owner is not implementing an approved monitoring system.

If you have any questions, I can be reached at 415/271-4320.

Sincerely,

*Cynthia Chapman*

Cynthia Chapman  
Hazardous Materials Specialist

c: Gil Jensen, Alameda County District Attorney, Consumer and  
Environmental Protection Division  
Baljit Singh, Friendly Cabs  
Gurdev Kaur