SON 15-09-0/2

DAVID J. KEARS, Agency Director

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

May 9, 2006

Mr. Gil Moore New West Stations, Inc. 1831 16th Street Sacramento, CA 95814

Subject: Fuel Leak Case No. RO0002440, Bernard's Gas, 1051 Airway Blvd., Livermore, CA - Work Plan Approval

Dear Mr. Moore:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Workplan for Monitoring Well Installation Addendum," dated April 14, 2006 and prepared on your behalf by Apex Envirotech, Inc. The Work Plan Addendum proposes the installation of seven shallow and one deeper monitoring well to investigate the extent of contamination at the site.

This site is located within the Livermore-Amador Basin where groundwater is extracted for drinking water use. Methyl tert-butyl ether (MTBE) was detected in 14 of the 15 soil samples collected during fuel line and dispenser renovation in 2001 at concentrations up to 7,500 micrograms per kilogram ($\mu g/kg$). MTBE was also detected in each of the four grab groundwater samples collected at the site in 2002 at concentrations up to 280 micrograms per liter ($\mu g/L$).

The Work Plan Addendum does not address two of the technical comments in our November 18, 2005 correspondence. The Work Plan Addendum indicated that the requested information regarding soil excavation and disposal during the 2001 dispenser and line removal could not be obtained. Secondly, the Work Plan Addendum does not present plans to define the lateral and vertical extent of soil contamination in the source area or conduct interim soil remediation in the source area as requested in our November 18, 2005 correspondence. Further characterization to define the lateral and vertical extent of soil contamination or interim remediation in the source area is required. However, in order to avoid further delay, we request that you proceed with the proposed well installation provided that technical comment 2 below is addressed during the field investigation. As discussed in technical comment 1, plans to characterize the lateral and vertical extent of soil contamination or implement interim remediation in the source area are required and are to be presented in the Site Investigation Report requested below.

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

TECHNICAL COMMENTS

 Lateral and Vertical Extent of Soil Contamination. As discussed in our June 14, 2005 correspondence, the lateral and vertical extent of soil contamination has not been defined at Mr. Gil Moore May 9, 2006 Page 2

the site. Total petroleum hydrocarbons as gasoline (TPHg) were detected in soil samples collected beneath the product lines and dispensers at concentrations up to 2,800 milligrams per kilogram (mg/kg). TPH as diesel was detected in the soil samples at concentrations up to 9,500 mg/kg and MTBE was detected at concentrations up to 7,500 µg/kg. The "Fuel Dispenser and Line Removal Report," does not describe overexcavation of contaminated soil or confirmation sampling to delineate the extent of contaminated soil. The current work plan proposes seven monitoring wells around the perimeter of the site or off-site and one monitoring well approximately 15 to 20 feet east of the nearest product line. Four previous borings at the site (GP-1 through GP-4) were located approximately 10 to 15 feet from the nearest dispensers and product lines but included only one soil sample. In addition, no logs are available for two of the four borings (GP-3 and GP-4) to describe encountered conditions. The lateral and vertical extent of soil contamination in the source area are to be defined or interim soil remediation is to be conducted. Please present plans to characterize the lateral and vertical extent of soil contamination or implement interim remediation in the source area in the Site Investigation Report requested below.

- 2. Soil Samples. ACEH concurs with the submittal of the soil sample collected at the 24-foot depth interval and at obvious lithologic changes for chemical analyses. In addition, the soil samples are to be screened in the field to select samples for chemical analyses. Soil samples are to be submitted for analyses for all depth intervals where staining, odor, or elevated PID readings are observed. If staining, odor, or elevated PID readings are observed over an interval of several feet, a sufficient number of soil samples from this interval should be submitted for laboratory analyses to characterize the fuel hydrocarbon concentrations within this interval. Please include these results in the Site Investigation Report requested below.
- 3. Groundwater Monitoring. Following the development and initial sampling of the monitoring wells, the wells are to be sampled on a quarterly basis in the future. Please analyze the groundwater samples for the analytes proposed in the Work Plan Addendum. Please present the results of the groundwater sampling in the quarterly monitoring reports requested below.
- 4. Geotracker EDF Submittals. The electronic submittal of reports prepared after July 1, 2005, to the Geotracker database is not the only requirement for Geotracker compliance. 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 website 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 accurate to within 1-meter accuracy, using NAD 83, and transmitted electronically to the SWRCB Geotracker website. Therefore, 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.

TECHNICAL REPORT REQUEST

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

Mr. Gil Moore May 9, 2006 Page 3

- September 15, 2006 Soil and Groundwater Investigation Report
- February 15, 2007 Quarterly Monitoring Report Fourth 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

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 (https://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.

Mr. Gil Moore May 9, 2006 Page 4

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: Matt Katen, QIC 80201 Zone 7 Water Agency 100 North Canyons Parkway Livermore, CA 94551

> Danielle Stefani Livermore-Pleasanton Fire Department 3560 Nevada Street Pleasanton, CA 94566

Jennifer Worsley
Apex Envirotech, Inc.
11244 Pyrites Way
Gold River, CA 95670

Donna Drogos, ACEH Jerry Wickham, ACEH File

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DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES

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

March 31, 2006

Mr. Gil Moore New West Stations, Inc. 1831 16th Street Sacramento, CA 95814

Subject: Fuel Leak Case No. RO0002440, Bernard's Gas, 1051 Airway Blvd., Livermore, CA - Work Plan Approval

Dear Mr. Moore:

In correspondence dated November 18, 2005 (copy attached), Alameda County Environmental Health (ACEH) requested that you submit a revised Work Plan for soil and water investigation at the above-referenced site by January 31, 2006. Specific items requiring revision were identified in technical comments provided in the November 18, 2005 correspondence. To date, we have not received a revised Work Plan. Your site overlies a sensitive drinking water aquifer, and limited progress has been made toward evaluating potential petroleum hydrocarbon impacts. The lateral and vertical extents of subsurface contamination at the site are undefined.

Your revised Work Plan is late, and your fuel leak site is not in compliance with ACEH directives. We request that you submit the revised Work Plan as soon as possible. ACEH makes this request pursuant to California Health & Safety Code Section 25296.10. 23 CCR sections 2652 through 2654, and 2721 through 2728 outline the duties of a responsible party in response to a reportable unauthorized release from a petroleum UST system, and require your compliance with this request.

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

Please note that further delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive cost reimbursement from the State's Underground Storage Tank Cleanup Fund.

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

Sincerely,

erry Wickham

Hazardous Materials Specialist

Mr. Gil Moore March 31, 2006 Page 2

Attachment: ACEH Correspondence Dated November 18, 2005 Requesting Revised Work Plan

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Matt Katen, QIC 80201 Zone 7 Water Agency 100 North Canyons Parkway Livermore, CA 94551

> Shari Knieriem SWRCB-USTCF P.O. Box 944212 Sacramento, CA 94244

Danielle Stefani Livermore-Pleasanton Fire Department 3560 Nevada Street Pleasanton, CA 94566

Jennifer Worsley Apex Envirotech, Inc. 11244 Pyrites Way Gold River, CA 95670

Donna Drogos, ACEH Jerry Wickham, ACEH File

AGENCY



DAVID J. KEARS, Agency Director

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

FAX (510) 337-9335

November 18, 2005

Mr. Gil Moore New West Stations, Inc. 1831 16th Street Sacramento, CA 95814

Subject: Fuel Leak Case No. RO0002440, Bernard's Gas, 1051 Airway Blvd., Livermore, CA - Work Plan Approval

Dear Mr. Moore:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Workplan for Monitoring Well Installation and Letter Response," dated October 7, 2005 and prepared on your behalf by Apex Envirotech, Inc. The work plan proposes the installation of six shallow and one deep monitoring well to investigate the extent of contamination at the site.

This site is located within the Livermore-Amador Basin where groundwater is extracted for drinking water use. Methyl tert-butyl ether (MTBE) was detected in 14 of the 15 soil samples collected during fuel line and dispenser renovation in 2001 at concentrations up to 7,500 micrograms per kilogram (µg/kg). MTBE was also detected in each of the four grab groundwater samples collected at the site in 2002 at concentrations up to 280 micrograms per liter.

Based on our review of the case file and work plan, we request some revisions to the work plan, which are described in the technical comments below. Therefore, we request that you address the technical comments below and submit a revised work plan or work plan addendum to ACEH by January 10, 2006.

TECHNICAL COMMENTS

1. Dispenser and Product Line Removal. ACEH case files contain only the document entitled, "Fuel Dispenser and Line Removal Report," dated August 21, 2001 that describes the dispenser and product line renovation that took place in 2001. The "Fuel Dispenser and Line Removal Report," presents analytical results for soil samples collected beneath the fuel dispensers and product lines and provides field observations of contamination observed at various locations beneath the dispensers and lines. However, the report does not describe the extent of soil excavation during or following the renovation or the disposition of excavated soils. Please submit a description or map to show the extent of excavation of contaminated soil during or subsequent to the 2001 dispenser and line removal and provide documentation to show the volume of soil removed and the facility where the soil was disposed off-site. IN particular, please describe whether the observed contamination beneath the lines and dispensers was excavated. Please present this information in the revised Work Plan requested below.

- 2. Lateral and Vertical Extent of Soil Contamination. As discussed in our June 14, 2005 correspondence, the lateral and vertical extent of soil contamination has not been defined at the site. Total petroleum hydrocarbons as gasoline (TPHg) were detected in soil samples collected beneath the product lines and dispensers at concentrations up to 2,800 milligrams per kilogram (mg/kg). TPH as diesel was detected in the soil samples at concentrations up to 9,500 mg/kg and MTBE was detected at concentrations up to 7,500 µg/kg. The "Fuel Dispenser and Line Removal Report," does not describe overexcavation of these contaminated soil or confirmation sampling to delineate the extent of contaminated soil. The current work plan proposes six soil monitoring wells around the perimeter of the site or offsite and one monitoring well approximately 15 to 20 feet east of the nearest product line. Four previous borings at the site (GP-1 through GP-4) were located approximately 10 to 15 feet from the nearest dispensers and product lines but included only one soil sample. In addition, no logs are available for two of the four borings (GP-3 and GP-4) to describe encountered conditions. The lateral and vertical extent of soil contamination in the source area are to be defined or interim soil remediation is to be conducted. Please describe the approach that will be implemented for the source area in the revised Work Plan requested below.
- Proposed Well Locations. On the attached figure, please see the suggested revisions to the proposed monitoring well locations. ACEH also requests that an additional shallow monitoring well be installed adjacent to the proposed deep monitoring well, MW-5.
- 4. Soil Samples. The Work Plan proposes to collect soil samples at five-foot intervals for logging purposes. ACEH requests that soils be continuously sampled for logging purposes. ACEH concurs with the submittal of the sample collected at the 24-foot depth interval and at obvious lithologic changes for chemical analyses. In addition, the soil samples are to be screened in the field to select samples for chemical analyses. Soil samples are to be submitted for analyses for all depth intervals where staining, odor, or elevated PID readings are observed. If staining, odor, or elevated PID readings are observed over an interval of several feet, a sufficient number of soil samples from this interval should be submitted for laboratory analyses to characterize the fuel hydrocarbon concentrations within this interval. Please include these plans inn the revised work plan requested below.
- Laboratory Analyses. ACEH concurs with the proposed analyses for soil and groundwater samples but requests that ethanol also be included as an analyte. Please include this modification in the revised work plan requested below.
- 6. Detailed Well Survey. Please review the results of the well survey previously completed for the site ("Sensitive Survey Results and Site Conceptual Model," dated December 19, 2002), which indicates that no wells are located within ½ mile of the site. A cursory review of the map entitled "Groundwater Program Wells," which is included as Attachment 2, shows wells in close proximity to the site. We recommend that you obtain well information from the Zone 7 Water Agency in addition to information you may have previously reviewed from the State of California Department of Water Resources. Please present the revised well survey results in the revised work plan requested below.
- 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 website 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 accurate to within 1-meter accuracy, using NAD 83, and transmitted electronically to the SWRCB Geotracker website. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). 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 January 10, 2006.

TECHNICAL REPORT REQUEST

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

January 10, 2006 – Revised Work Plan or Work Plan Addendum

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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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.

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

Sincerely,

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Hazardous Materials Specialist

Attachment 1: Revised Figure 2 - Site Plan Map

Attachment 2: Groundwater Program Wells, Figure 4-11, Zone 7 Water Agency

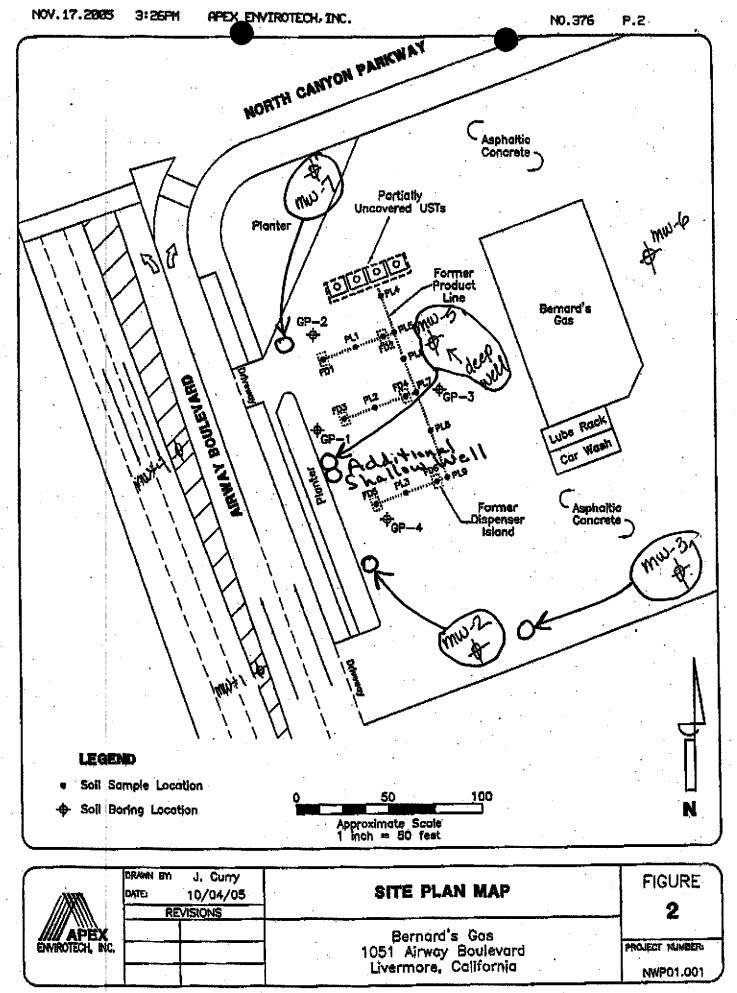
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cc: Colleen Winey, QIC 80201 Zone 7 Water Agency 100 North Canyons Parkway Livermore, CA 94551

> Danielle Stefani Livermore-Pleasanton Fire Department 3560 Nevada Street Pleasanton, CA 94566

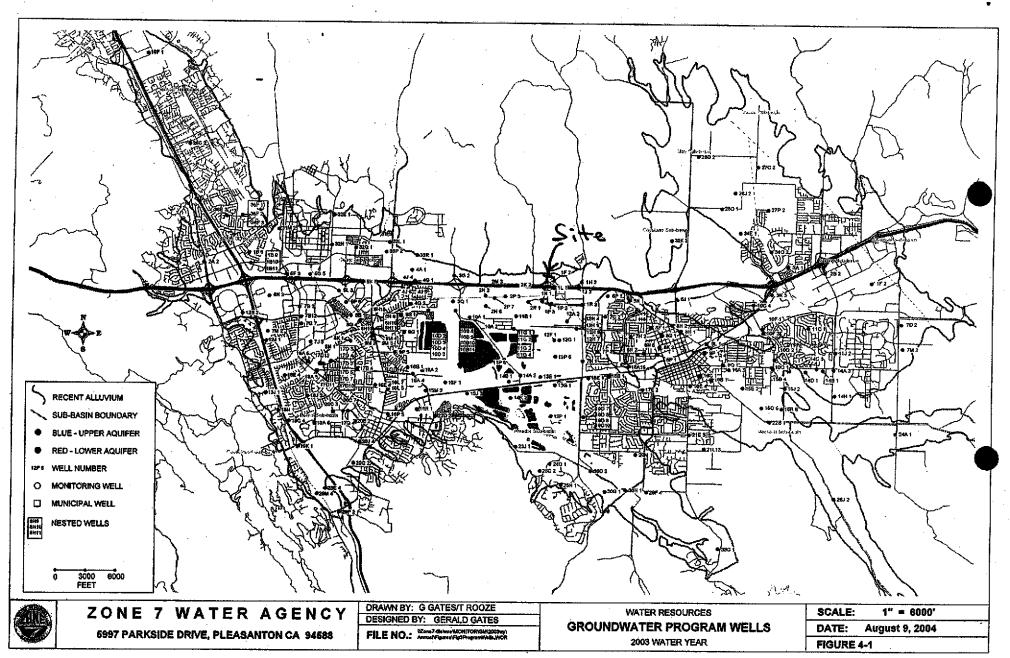
Jennifer Worsley Apex Envirotech, Inc. 11244 Pyrites Way Gold River, CA 95670

Donna Drogos, ACEH Jerry Wickham, ACEH File



Attachment 1

Attachment 2



AGENCY

DAVID J. KEARS, Agency Director



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November 18, 2005

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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,

lerry Wickham

Hazardous Materials Specialist

Attachment 1: Revised Figure 2 - Site Plan Map

Attachment 2: Groundwater Program Wells, Figure 4-11, Zone 7 Water Agency

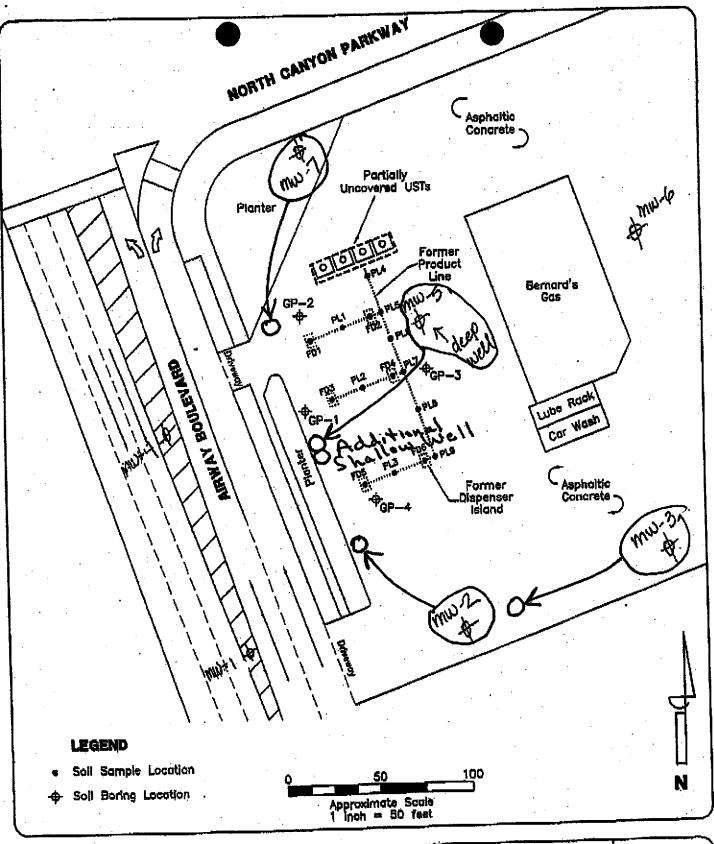
Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Colleen Winey, QIC 80201 Zone 7 Water Agency 100 North Canyons Parkway Livermore, CA 94551

> Danielle Stefani Livermore-Pleasanton Fire Department 3560 Nevada Street Pleasanton, CA 94566

Jennifer Worsley Apex Envirotech, Inc. 11244 Pyrites Way Gold River, CA 95670

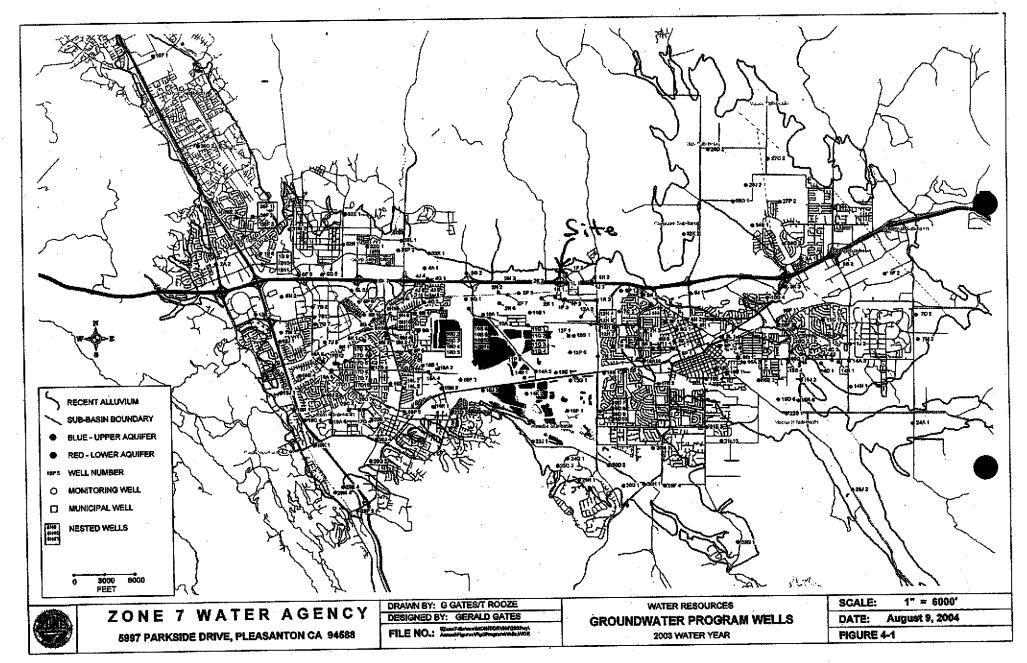
Donna Drogos, ACEH Jerry Wickham, ACEH File



ſ	DRAWN BY J, CUTTY DATE: 10/04/05 REVISIONS	SITE PLAN MAP	FIGURE 2
		Bernard's Gas 1051 Airway Boulevard Livermore, California	PROJECT NUMBER: NWP01.001

Attachment 1

MHachment 2



AGENCY



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DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES

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

October 10, 2005

Mr. Gil Moore New West Stations, Inc. 1831 16th Street Sacramento, CA 95814

Dear Mr. Moore:

Subject: Fuel Leak Case No. RO0002440, Bernard's Gas, 1051 Airway Blvd., Livermore, CA

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site. To date, the extent of soil and groundwater contamination from an unauthorized release at your site has not been defined and site cleanup has not been conducted. In correspondence dated June 14, 2005, ACEH requested that you submit a work plan by August 30, 2005 for investigation of soil and groundwater contamination at your site. No work plan has been received by this office to date. The June 12, 2005 ACEH correspondence also requested that site data be entered into the Geotracker database, as required by state regulations. Your site data have not been entered into the Geotracker database. No extensions of due dates or approval of delays have been granted by this office.

Please not that delays in investigation, late reports, or enforcement actions may result in your site becoming ineligible to receive grant money from the state's Underground Storage Tank Fund (Senate Bill 2004) to reimburse you for the cost of cleanup. In addition, we may refer 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.

In order for your site to be in compliance with regulatory requests, please **submit the previously requested work plan and enter the site data into the Geotracker database by November 10, 2005.** ACEH's June 14, 2005 correspondence, which describes the requirements for the work plan and submittal to the Geotracker database, is included as an attachment to this letter. If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jeny Wickitalli

Hazardous Materials Specialist

Attachments: ACEH correspondence to Mr. Gil Moore dated June 14, 2005

Gil Moore October 10, 2005 Page 2

cc: Sunil Ramdass SWRCB Cleanup Fund 1001 I Street, 17th floor Sacramento, CA 95814-2828

> Jennifer Worsley Apex Envirotech, Inc. 11244 Pyrites Way Gold River, CA 95670

> Donna Drogos, ACEH Jerry Wickham, ACEH File

AGENCY



DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES

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

June 14, 2005

Gil Moore New West Stations, Inc. 1831 16th Street Sacramento, CA 95814

Dear Mr. Moore:

Subject: Fuel Leak Case No. RO0002440, Bernard's Gas, 1051 Airway Blvd., Livermore, CA - Request for Work Plan

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the subject site and the report entitled, "Sensitive Survey Results and Site Conceptual Model," dated December 19, 2002, prepared on behalf of New West Petroleum, Inc. by Apex Envirotech, Inc. During fuel dispenser and line removal in June 2001, field evidence of soil contamination was observed beneath several former fuel dispensers and product line couplings. The concentration of total petroleum hydrocarbons as gasoline (TPHg) was up to 2,800 milligrams per kilogram (mg/kg) and the concentration of TPH as diesel (TPHd) was up to 9,500 mg/kg in soil samples collected beneath the dispensers and lines. Methyl tert butyl ether (MTBE) was detected in 16 of the 17 soil samples analyzed at concentrations up to 5.6 mg/kg. MTBE was detected in four groundwater samples collected on June 12, 2002.

This letter presents a request for full three-dimensional definition and investigation of soil and groundwater contamination from the unauthorized release at your site. You are hereby required to complete a soil and groundwater investigation 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 groundwater investigation. We request that you prepare and submit a work plan for the soil and groundwater investigation by August 30, 2005, that addresses each of the following technical directives.

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. Soil Boring Logs.

Previous reports submitted to date for this site have included soil boring logs for borings GP-1 and GP-2 only. Please submit soil boring logs for borings GP-3 and GP-4 in the Work Plan requested below.

2. Regional Geologic and Hydrogeologic Setting

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. Report your results in the Work Plan requested below.

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 groundwater sampling at the site indicate the presence of methyl tert-butyl ether (MTBE) in groundwater at your site. 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.

The chemical and physical properties of MTBE should be considered in planning the subsurface investigation. MTBE is highly soluble, very mobile in groundwater, and is not readily biodegradable. 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 and must fully describe the proposed scope and methods for the soil and groundwater investigation.

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. The use of additional methods to understand the hydrogeology, such as pumping tests, geophysical methods, etc. may be proposed.

Monitoring wells will be needed to provide groundwater elevation data to be used in estimating the direction and magnitude of the hydraulic gradient. The 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 6 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 results of the subsurface investigation, including the expedited site assessment, should be presented in the Soil and Groundwater Investigation Report, which is requested below.

5. 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. Report your findings in the Soil and Groundwater Investigation Report requested below.

6. 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 submerged 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 Groundwater Investigation 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. 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 first 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 two 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.

7. 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 collected 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 submeter 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 August 15, 2005.

TECHNICAL REPORT REQUEST

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

- August 30, 2005 Work Plan for Soil and Groundwater Investigation
- 120 days after ACEH approval of Work Plan Soil and Groundwater Investigation Report
- December 30, 2005 Quarterly Groundwater Monitoring 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

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

Sincerely,

Jerry Wickham, P.G.

Hazardous Materials Specialist

cc: Ms. Jennifer Worsley Apex Envirotech, Inc. 11244 Pyrites Way Gold River, CA 95670

> Donna Drogos, ACEH Jerry Wickham, ACEH File

AGENCY





SENT 6-1505

ENVIRONMENTAL HEALTH SERVICES

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

June 14, 2005

Gil Moore New West Stations, Inc. 1831 16th Street Sacramento, CA 95814

Dear Mr. Moore:

Subject: Fuel Leak Case No. RO0002440, Bernard's Gas, 1051 Airway Blvd., Livermore, CA - Request for Work Plan

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the subject site and the report entitled, "Sensitive Survey Results and Site Conceptual Model," dated December 19, 2002, prepared on behalf of New West Petroleum, Inc. by Apex Envirotech, Inc. During fuel dispenser and line removal in June 2001, field evidence of soil contamination was observed beneath several former fuel dispensers and product line couplings. The concentration of total petroleum hydrocarbons as gasoline (TPHg) was up to 2,800 milligrams per kilogram (mg/kg) and the concentration of TPH as diesel (TPHd) was up to 9,500 mg/kg in soil samples collected beneath the dispensers and lines. Methyl tert butyl ether (MTBE) was detected in 16 of the 17 soil samples analyzed at concentrations up to 5.6 mg/kg. MTBE was detected in four groundwater samples collected on June 12, 2002.

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TECHNICAL REPORT REQUEST

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- 120 days after ACEH approval of Work Plan Soil and Groundwater Investigation Report
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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

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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

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AGENCY OVERSIGHT

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

Sincerely,

Jerry Wickham, P.G.

Hazardous Materials Specialist

cc: Ms. Jennifer Worsley Apex Envirotech, Inc. 11244 Pyrites Way Gold River, CA 95670

> Donna Drogos, ACEH Jerry Wickham, ACEH File

AGENCY



09-03-02

DAVID J. KEARS, Agency Director

RO0002440

August 30, 2002

Mr. Gil Moore New West Stations, Inc. 1831 16th Street Sacramento, CA 95814 **ENVIRONMENTAL HEALTH SERVICES**

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

RE: Site Conceptual Model for 1051 Airway Blvd, Livermore, CA

Dear Mr. Moore:

I have completed review of Apex Envirotech, Inc.'s August 2002 *Soil Boring and Groundwater Sample Collection Results Report* prepared for the above referenced site. Four soil borings were advanced around the fuel dispenser islands in June 2002. Soil and groundwater samples were collected from each borehole. Soil samples collected at the capillary fringe (approximately 24 feet below ground surface) did not contain contaminants sought. Groundwater samples contained MTBE ranging from 4.3 to 280 parts per billion.

Groundwater at the Livermore Basin is a source of drinking water for the city of Livermore. Since MTBE was detected in the groundwater samples, additional investigations are required to determine if the fuel release at the sight will impact potential drinking water wells. At this time, a detail site conceptual model should be prepared for the site to identify any and all potential sensitive receptors. Please include information on wells (monitoring, irrigation, industrial, and drinking water wells), potential conduits (sewer, storm drain, underground channels, etc.), and groundwater elevation and flow direction in the vicinity (within ½ mile radius). Based on the findings, the need for and location of groundwater monitoring wells can be assessed.

The required site conceptual model is due within 90 days of the date of this letter, or by **December 2, 2002.** If you have any questions, I can be reached at (510) 567-6762.

eva chu

Hazardous Materials Specialist

c: Rebekah Westrup, Apex Envirotech, 11244 Pyrites Way, Gold River, CA 95670

bernard's-3

AGENCY



D-1900

DAVID J. KEARS, Agency Director

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 25

1131 Harbor Bay Parkway, Suite 250 Atameda, CA 94502-6577

ENVIRONMENTAL HEALTH SERVICES

(510) 567-6700 FAX (510) 337-9335

R00002440

February 15, 2002

Mr. Gil Moore New West Stations, Inc 1831 16th Street Sacramento, CA 95814

RE: Work Plan Approval for Bernard's Gas at 1051 Airway Blvd, Livermore, CA

Dear Mr. Moore:

I have completed review of Grayland Environmental's January 2002 *Site Contamination Work Plan* prepared for the above referenced site. The proposal to advance soil borings to collect soil and grab groundwater samples is acceptable with the following changes/additions:

- An additional boring should be advanced west of the dispenser area (in the planter area, near FD1 and FD3)
- At a minimum, two of the borings should be continuously logged and soil samples should also be collected at any change in lithology

Soil and groundwater samples will be analyzed for TPHg, TPHd, BTEX, MTBE and other ether oxygenates. Based on the findings, permanent groundwater monitoring wells may be required. Before permanent wells are installed, this agency will need to re-review the proposed well locations and screen intervals.

The first half of the work plan should be implemented within 90 days of the date of this letter or by May 17, 2002. Please provide at least 72 hours advance notice of field activities. If you have any questions, I can be reached at (510) 567-6762.

eva chu

Hazardous Materials Specialist

email: Jeffrey Clayton

bernard's-2

AGENCY

DAVID J. KEARS, Agency Director



11-20-0)

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250

Alameda, CA 94502-6577

(510) 567-6700

FAX (510) 337-9335

ENVIRONMENTAL HEALTH SERVICES

R00002440

November 19, 2001

Mr. Christopher Moore New West Stations, Inc. 1831 16th Street Sacramento, CA 95814

RE: PSA for 1051 Airway Blvd, Livermore, CA

Dear Mr. Moore:

I have completed review of Grayland Environmental's August 2001 Fuel Dispenser and Line Removal Report prepared for the above referenced site. During fuel dispenser and product line upgrade at the site, soil samples collected beneath the dispensers and product piping contained up to 2,800 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPHg), 9,500ppm TPH as diesel, as well as elevated benzene, toluene, ethyl-benzene and xylene (BTEX) and MTBE constituents. Clearly, an unauthorized release of fuel hydrocarbons has occurred at the site.

At this time, additional investigations are required to delineate the extent of the fuel release and to determine if groundwater has been impacted. Such an investigation shall be in the form of a **Preliminary Site Assessment**, or PSA. The information gathered by the PSA will be used to determine an appropriate course of action to remediate the site, if deemed necessary. The PSA must be conducted in accordance with the RWQCB <u>Staff</u> <u>Recommendations for the Initial Evaluation and Investigation of Underground Tanks</u>, and Article 11 of Title 23, California Code of Regulations. The major elements of such an investigation are summarized in the attached Appendix A.

The PSA proposal is due within 45 days of the date of this letter. Once the proposal is approved, field work should commence within 60 days. A report must be submitted within 45 days after the completion of this phase of work at the site. Subsequent reports are to be submitted guarterly until this site qualifies for RWQCB "sign off." All reports and proposals must be submitted under seal of a California Registered Geologist, Certified Engineering Geologist, or Registered Civil Engineer.

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

eva chu

Hazardous Materials Specialist

attachment

bernard's-1



RAFAT A. SHAHID, Assistant Agency Director

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

December 30, 1992

Ms. Patricia Lewis Bernard's 1051 Airway Blvd. Livermore, CA 94550

Re: FIVE YEAR UNDERGROUND STORAGE TANK OPERATING PERMIT AT 1051 AIRWAY BLVD., LIVERMORE.

Dear Ms. Lewis

Enclosed is your five year permit to operate a total of four underground petroleum storage tanks (UST's) at the above referenced facility. These UST's are single-walled bare steel with an exterior coating and cathodic protection. The piping system is trench-lined double-walled fiberglass pressure-piping. To operate under a valid permit, you are required to comply with conditions in Title 23 of the California Code of Regulations (CCR).

Consult the revised Title 23, CCR for additional requirements. To obtain a copy of the regulations, you may contact the State Water Resources Control Board at (916) 657-0917.

Please feel free to contact me with any questions at (510) 271-4320.

Sincerely,

Jeff Shapiro

Hazardous Materials Specialist

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



RAFAT A. SHAHID, Assistant Agency Director

April 6, 1992

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

Mr. Bernard Flayac 1051 Airway Blvd. Livermore, CA 94550

Re:

FIVE-YEAR PERMITS FOR OPERATION OF FOUR UNDERGROUND STORAGE TANKS (UST'S) AT 1051 AIRWAY BLVD. LIVERMORE.

According to our records the above mentioned facility has not received a five-year permit to operate UST's. Please complete the following items marked below and return them to me within 10 days. The example plans enclosed, should be used only as guidelines and may not meet your requirements under Title 23.

2 1. An accurate and complete plot plan.

2. A written spill response plan. (enclosed)

3. A written tank monitoring plan. (enclosed)

-7 4. Results of precision tank test(s) (initial and annual).

- 5. Results of precision pipeline leak detector tests (initial and annual).

6. Complete UST PERMIT FORM A-one per facility (enclosed)

7. Complete UST PERMIT FORM B-one per tank. (enclosed)

- 8. Complete UST PERMIT FORM C-one per tank if information is available. (enclosed)

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

Sincerely,

Ravi Arulanantham

Senior Hazardous Materials Specialist

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