ExxonMobil Refining & Supply Company
Global Remediation – US Retail
4096 Piedmont Avenue #194
Oakland, California 94611
510.547.8196
510.547.8706 Fax
jennifer.c.sedlachek@exxonmobil.com

Jennifer C. Sedlachek
Project Manager

ExxonMobil
Refining & Supply

August 15, 2007

Mr. Jerry Wickham, P.G., C.E.G.
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RE: Former Exxon RAS #7-3567/3192 Santa Rita Road, Pleasanton, California.

Dear Mr. Wickham:

Attached for your review and comment is a letter report entitled ***Agency Response and Addendum to Work Plan for Additional Assessment,*** dated August 15, 2007, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Petaluma, California, and details proposed activities at the subject site.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document is true and correct to the best of my knowledge.

If you have any questions or comments, please contact me at (510)547-8196.

Sincerely,

Jennifer C. Sedlachek
Project Manager

Attachment: ERI's Agency Response and Addendum to Work Plan for Additional Assessment, dated August 15, 2007

cc: w/ attachment
Mr. Eddy So, California Regional Water Quality Control Board, San Francisco Bay Region
Ms. Colleen Morf, Zone 7 Water Agency
Mr. Robert C. Ehlers, M.S., P.E., The Valero Companies, Environmental Liability Management

w/o attachment
Ms. Paula Sime, Environmental Resolutions, Inc.

VALUE, QUALITY, RESPONSE

Southern California
Northern California
Pacific Northwest
Southwest
Texas
Montana

August 15, 2007
ERI 243103.W04

Ms. Jennifer C. Sedlachek
ExxonMobil Refining & Supply – Global Remediation
4096 Piedmont Avenue #194
Oakland, California 94611

SUBJECT Agency Response and Addendum to Work Plan for Additional Assessment
Former Exxon Service Station 7-3567
3192 Santa Rita Road, Pleasanton, California

Ms. Sedlachek:

At the request of Exxon Mobil Corporation (Exxon Mobil), Environmental Resolutions, Inc. (ERI) prepared this agency response and work plan addendum for the subject site. The work was requested by the Alameda County Health Care Services Agency Environmental Health Services (ACEH) in a letter dated May 18, 2007, in response to ERI's *Agency Response and Work Plan for Additional Assessment*, dated March 28, 2007 (Work Plan). To attempt coordination between the responsible parties (RPs), ERI obtained an extension on the due date for this work plan to August 17, 2007. Agency correspondence is provided in Attachment A.

AGENCY RESPONSE

The ACEH's comments are paraphrased below in bold type, and ERI's responses follow.

1. Proposed Scope of Work

The Work Plan proposes advancing soil borings at six locations to evaluate areas downgradient from the dispensers and underground storage tanks (USTs). However, the Work Plan does not include soil and groundwater sampling in the area of the USTs as requested in ACEH's September 5, 2006 correspondence. The apparent rationale for not proposing the requested work is stated in the last two sentences of the Work Plan section entitled, "TPH Source in the Tank Pit Area," which reads, "Because Exxon Mobil has not operated the USTs at the site for seven years, sampling soil and groundwater in the vicinity of the existing UST system does not necessarily provide information relevant to Exxon Mobil's release at the site. Concerns about soil and groundwater conditions in the current UST cavity should be addressed to the current operator of the USTs." Exxon Mobil owned and operated the USTs in their current location from 1988 to 2000. Unauthorized releases occurred at the site prior to 1988 and sometime between 1988 and 1998. We are not aware of any releases that occurred after 1998; please provide any evidence you have that releases occurred after 1998. The possibility that the investigation of a known release could encounter contamination from a more recent unknown release is not a basis for not conducting site characterization. Further, all RPs are jointly and severally liable for the pollution at this site. This directive letter requests that all releases at the site be investigated. During this and all subsequent phases of work, if different RPs have contributed to the release(s), then it is the responsibility of the RPs to apportion costs for the work amongst themselves. We find no basis for Exxon Mobil to avoid investigating the tank pit source area. Therefore, Exxon Mobil is to prepare a revised Work Plan by July 6, 2007 that includes a scope of work to investigate soil and groundwater contamination in the tank pit area as requested in our previous September 5, 2006 correspondence.

While ERI and XOM still feel that accessing and investigating active USTs is the responsibilty of the UST owner, an addendum to ERI's Work Plan, adding three additional borings (DP7 through DP9) in the vicinity of the USTs, is provided in the next section of this document.

2. Proposed Soil Sampling

We concur with the collection of continuous soil samples for logging and screening purposes. Retaining soil samples at approximately 5-foot intervals for laboratory analysis is acceptable. However, we request that soil samples be submitted for analyses for all depth intervals where staining, odor, or elevated photo-ionization detector (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 should be submitted for laboratory analyses to characterize the fuel hydrocarbon concentrations within this interval. Boring logs will be required for each boring.

ERI concurs with this request. To clarify, in addition to approximate 5-foot intervals, soil samples will be retained for analyses for all depth intervals where staining, odor, or elevated (greater than 100 parts per million by volume [ppmv]) PID readings are observed, and if these characteristics are noted over several feet of soil, ERI will submit multiple samples over the interval to obtain a complete vertical profile of residual hydrocarbon concentrations in soil.

3. Depth of Soil Borings and Grab Groundwater Sampling

The Work Plan currently indicates that paired direct-push/HydroPunch® borings will be advanced at six locations to a maximum depth of 65 feet below ground surface (fbgs). Since the stratigraphy of the site is already known, potential targeted intervals for depth-discrete groundwater sampling should be identified in the Work Plan. Please revise the Work Plan to identify the number of depth-discrete groundwater samples planned at each location and the stratigraphic intervals targeted. Although the planned depths for depth-discrete groundwater sampling may be adjusted based on encountered conditions, the targeted stratigraphic intervals should be consistent.

Based on review of boring logs, groundwater saturation levels within the upper clay unit are variable. Sediments were logged as dry, slightly damp, damp, moist, and wet. Free water was encountered in select borings between 25 and 39 fbgs in the upper clay unit. Groundwater saturation levels within the lower sand and gravel unit encountered between 41 and 51 fbgs are consistent across the site. With the exception of one sand unit logged as dry to moist (well MW8 at 51 feet during installation), sand and gravel layers in this unit were logged as wet. Free water in the lower sand and gravel unit was encountered in borings MW4 and MW8 at 50 and 62 fbgs, respectively. Based on sediment size and groundwater saturation levels included on the boring logs, hydraulic conductivity in the lower sand and gravel unit is likely higher than that of the upper clay unit.

Groundwater monitoring well MW8 is screened entirely within the lower sand and gravel unit; however, due to anomalous dry conditions encountered in the well from October 2000 to August 2004, it was excluded from the contour maps in the lower water-bearing zone. Since August 2004, groundwater has occurred at depths ranging from 46.63 to 65.15 fbgs.

Given that the occurrence of groundwater is highly variable in both the upper clay and lower sand and gravel units beneath the site, it is not possible to predict exactly what the sampling intervals will be prior to performing the direct-push borings. However, provided groundwater is available for sampling, ERI will attempt to collect two groundwater samples from the upper clay unit and two groundwater samples from the lower sand and gravel unit at each location. The intent of the depth discrete groundwater sampling is to obtain a vertical profile of hydrocarbon concentrations in groundwater beneath the site.

The HydroPunch® sampler is approximately 4 feet in length. To avoid communication between sampling intervals, a minimum of 1 foot of soil will remain undisturbed between HydroPunch® sampling intervals.

4. Proposed Laboratory Analyses

The proposed laboratory analyses for soil and groundwater are acceptable with the following additions. Please add ethanol analyses using Environmental Protection Agency (EPA) Method 8260B for all soil and groundwater samples. Please add lead analyses using EPA Method 6010B for all soil analyses.

ERI concurs with this request and will add ethanol analyses using EPA Method 8260B for the soil and groundwater samples, and lead analyses using EPA Method 6010B for the soil analyses.

5. Quarterly Groundwater Monitoring

We request that quarterly groundwater monitoring be continued at the site. Please continue to analyze the groundwater samples for total petroleum hydrocarbons as diesel (TPHd), total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and fuel oxygenates and present the results in the groundwater monitoring reports.

ERI will continue quarterly groundwater monitoring and sampling at the site with the requested analytes.

ADDENDUM TO WORK PLAN FOR ADDITIONAL ASSESSMENT

Soil and Groundwater Assessment

To investigate soil and groundwater conditions in the vicinity of the existing USTs, ERI proposes three additional paired direct-push/HydroPunch® borings (DP7 through DP9) for collection of soil and groundwater samples from shallow and deep zone sediments.

Proposed soil boring locations are shown on Plate 1.

Investigation Tasks

ERI and its subcontractors will perform field work in accordance with this work plan, ERI's field protocol (Attachment B), and a site-specific health and safety plan. Details of the work scope are described in the following subsections.

Task 1: Permitting

ERI will obtain soil boring permits from the Alameda County Public Works Department (Public Works) prior to advancing the borings.

Task 2: Subsurface Clearance

To avoid conflicts with existing underground utilities during the advancement of soil borings, ERI will:

- Mark the boring locations and contact Underground Service Alert (USA) at least 48 hours before field work begins.
- Obtain the services of a private utility locator to clear the boring locations for utilities.
- Clear each boring location using hand tools or vacuum excavation equipment to at least 8 fbgs.

Task 3: Soil Borings for Collection of Soil and Groundwater Samples

For collection of soil samples using dual-wall, direct-push equipment, ERI will:

- Obtain the services of a licensed well driller and observe the advancement of borings DP1 through DP9 using dual-wall, direct-push equipment. Soil borings will be advanced to a maximum depth of approximately 65 fbgs.

- Collect and visually examine soil samples from each boring to construct a boring log and screen soil samples with a PID. Soil samples will be identified using visual and manual methods and classified according to the Unified Soil Classification System (USCS). Soil samples will be collected continuously and retained for laboratory analysis at approximately 5-foot intervals. Additionally, soil samples will be retained for analyses in intervals where staining, odor, or PID readings greater than 100 ppmv are observed, and if these characteristics are noted over several feet of soil, ERI will submit multiple samples over the interval to obtain a complete vertical profile of residual hydrocarbon concentrations in soil.

- Tremie grout the borings with cement/bentonite slurry and refinish the surface to match the surrounding ground conditions upon completion of sampling.

- Submit soil samples collected from the borings for analysis to a California state-certified analytical laboratory, under Chain-of-Custody protocol. Samples will be analyzed for TPHd and TPHg using EPA Method 8015B; BTEX, oxygenated compounds (methyl tertiary butyl ether [MTBE], tertiary butyl alcohol [TBA], tertiary amyl methyl ether [TAME], ethyl tertiary butyl ether [ETBE], di-isopropyl ether [DIPE], and ethanol), and lead scavengers (1,2-dichloroethane [1,2-DCA] and 1,2-dibromoethane [EDB]) using EPA Method 8260B; and total lead using EPA Method 6010B.

For collection of depth-discrete groundwater samples, ERI will:

- Collect depth-discrete grab groundwater samples from water-bearing intervals using a HydroPunch® (or similar) sampling device in an adjacent boring.

- Tremie grout the borings with cement/bentonite slurry and refinish the surface to match the surrounding ground conditions upon completion of sampling.

- Submit grab groundwater samples collected from the borings for analysis to a California state-certified analytical laboratory, under Chain-of-Custody protocol. Samples will be analyzed for TPHd and TPHg using EPA Method 8015B; BTEX, oxygenated compounds (MTBE, TBA, TAME, ETBE, DIPE, and ethanol), and lead scavengers (1,2-DCA and EDB) using EPA Method 8260B.

Task 4: Waste Disposal

Soil and rinsate water generated during the field work will be stored in 55-gallon metal drums at the station. ERI will collect one composite soil sample (four brass sleeves) from the drums for laboratory analysis. Upon receipt of the laboratory analytical results, ERI will evaluate disposal options and coordinate with Exxon Mobil for disposal of the soil and water at an appropriate disposal facility.

Task 5: Report Preparation and Submittal

After reviewing the results of the field investigation, ERI will prepare a report documenting the results. The report will include tabulated soil and groundwater analytical data, cross sections depicting soil stratigraphy, groundwater occurrence, analytical results, and ERI's conclusions and recommendations.

DOCUMENT DISTRIBUTION

ERI recommends forwarding copies of this report to:

Mr. Jerry Wickham, P.G., C.E.G.
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Mr. Eddy So
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Ms. Colleen Morf
Zone 7 Water Agency
100 North Canyon Parkway
Livermore, California 94551

Mr. Robert C. Ehlers, M.S., P.E.
The Valero Companies
Environmental Liability Management
685 West Third Street
Hanford, California 93230

LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental practice in California at the time this investigation was performed. This report has been prepared for Exxon Mobil, and any reliance on this report by third parties shall be at such party's sole risk.

Please call Ms. Paula Sime, ERI's project manager for this site, at (707) 766-2000 with questions regarding this report.

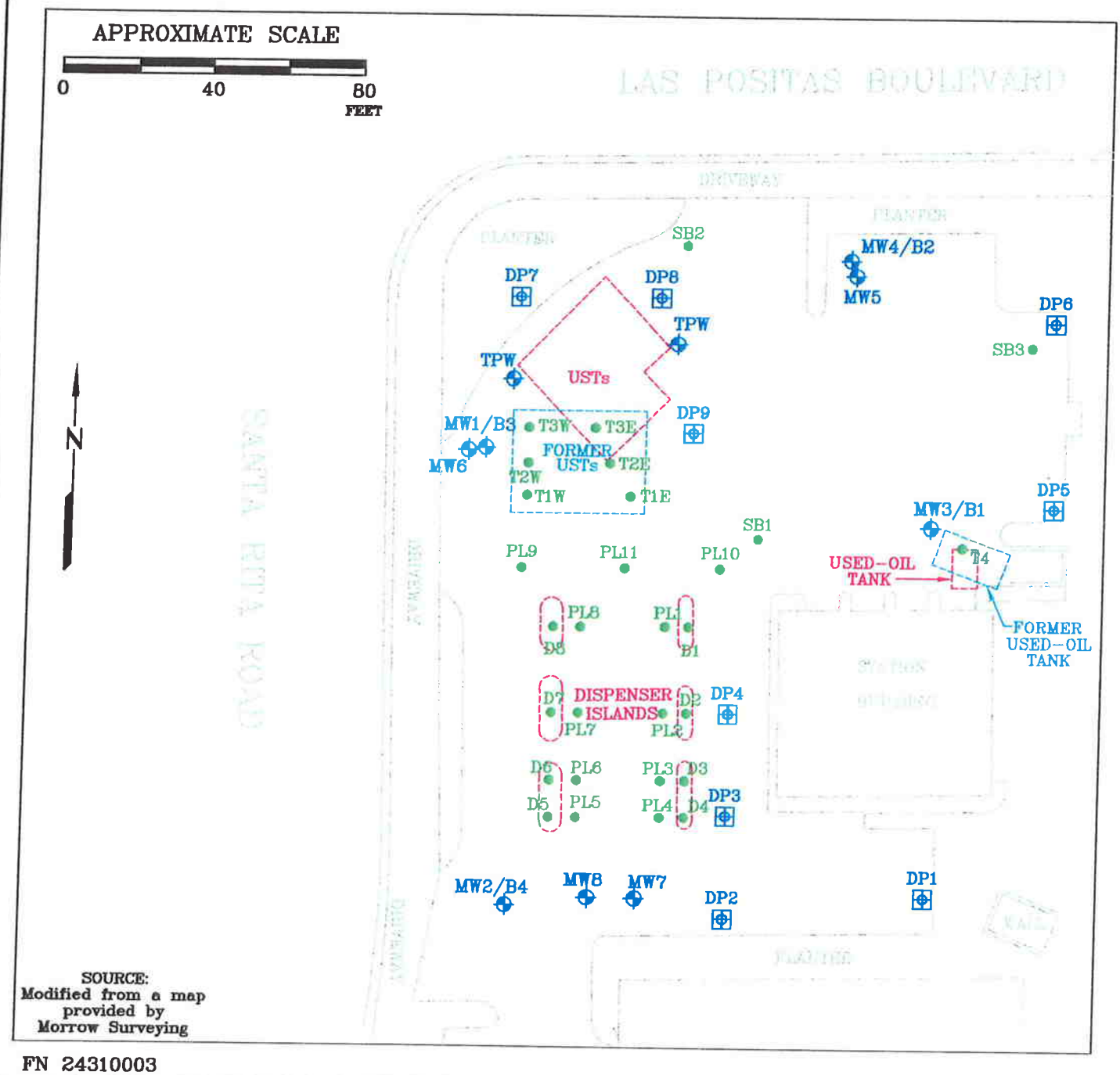
Sincerely,
Environmental Resolutions, Inc.

Paula Sime
Project Manager

Heidi L. Dieffenbach-Carle
P.G. 6793

Attachments: Plate 1: Proposed Boring Locations

Attachment A: Agency Correspondence
Attachment B: Field Protocol



FN 24310003

EXPLANATION

MW8 — Groundwater Monitoring Well

DP9 — Proposed Direct-Push/ Hydropunch Boring

TPW — Tank Pit Well

SB3 — Boring Location

PROPOSED BORING LOCATIONS

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO. 2431

PLATE 1

ATTACHMENT A

AGENCY CORRESPONDENCE

2431
7-3567
Alameda

ALAMEDA COUNTY
HEALTH CARE SERVICES
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

May 18, 2007

Ms. Jennifer Sedlacheck
Exxon Mobil
4096 Piedmont, #194
Oakland, CA 94611

Mr. Robert Ehlers
Valero Energy Corporation
685 West Third Street
Hanford, CA 93230

Mr. Steve Asmann
Steve Asmann Incorporated
3192 Santa Rita Road
Pleasanton, CA 94566

Subject: Fuel Leak Case No. RO0002426 and Geotracker Global ID T0600100539, Valero #3827, 3192 Santa Rita Road, Pleasanton, CA 94566

Dear Ms. Sedlacheck, Mr. Ehlers, and Mr. Asmann:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the recently submitted document entitled, "Agency Response and Work Plan for Additional Assessment," dated March 28, 2007 and prepared by Environmental Resolutions, Inc. The Work Plan was prepared in response to technical comments in ACEH correspondence dated September 5, 2006, which are included as an attachment.

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

TECHNICAL COMMENTS

1. **Proposed Scope of Work.** The Work Plan proposes advancing soil borings at six locations to evaluate areas downgradient from the dispensers and USTs. However, the Work Plan does not include soil and groundwater sampling in the area of the USTs as requested in ACEH's September 5, 2006 correspondence (attached). The apparent rationale for not proposing the requested work is stated in the last two sentences of the Work Plan section entitled, "TPH Source in the Tank Pit Area," which reads, "Because Exxon Mobil has not operated the USTs at the site for seven years, sampling soil and groundwater in the vicinity of the existing UST system does not necessarily provide information relevant to Exxon Mobil's release at the site. Concerns about soil and groundwater conditions in the current UST cavity should be addressed to the current operator of the USTs." ExxonMobil owned and operated the USTs in their current location from 1988 to 2000. Unauthorized releases occurred at the site prior to 1988 and sometime between 1988 and 1998. We are not aware of any releases that occurred after 1998; please provide any evidence you have that releases occurred after 1998. The possibility that the investigation of a known release could encounter contamination from a more recent unknown release is not a basis for not

conducting site characterization. Further, all responsible parties (RPs) are jointly and severally liable for the pollution at this site. This directive letter requests that all releases at the site be investigated. During this and all subsequent phases of work, if different RPs have contributed to the release(s), then it is the responsibility of the RPs to apportion costs for the work amongst themselves. We find no basis for ExxonMobil to avoid investigating the tank pit source area. Therefore, ExxonMobil is to prepare a revised Work Plan **by July 6, 2007** that includes a scope of work to investigate soil and groundwater contamination in the tank pit area as requested in our previous September 5, 2006 correspondence.

2. **Proposed Soil Sampling**. We concur with the collection of continuous soil samples for logging and screening purposes. Retaining soil samples at approximately 5-foot intervals for laboratory analysis is acceptable. However, we request that soil samples 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 should be submitted for laboratory analyses to characterize the fuel hydrocarbon concentrations within this interval. Boring logs will be required for each boring. Please include this clarification in the revised Work Plan requested below.

3. **Depth of Soil Borings and Grab Groundwater Sampling**. The Work Plan currently indicates that paired direct-push/HydroPunch® borings will be advanced at six locations to a maximum depth of 65 feet bgs. Since the stratigraphy of the site is already known, potential targeted intervals for depth-discrete groundwater sampling should be identified in the Work Plan. Please revise the Work Plan to identify the number of depth-discrete groundwater samples planned at each location and the stratigraphic intervals targeted. Although the planned depths for depth-discrete groundwater sampling may be adjusted based on encountered conditions, the targeted stratigraphic intervals should be consistent.

4. **Proposed Laboratory Analyses.** The proposed laboratory analyses for soil and groundwater are acceptable with the following additions. Please add ethanol analyses using EPA Method 8260B for all soil and groundwater samples. Please add lead analyses using EPA Method 6010B for all soil analyses.

5. **Quarterly Groundwater Monitoring**. We request that quarterly groundwater monitoring be continued at the site. Please continue to analyze the groundwater samples for TPHd, TPHg, BTEX, and fuel oxygenates and present the results in the groundwater monitoring reports requested below.

TECHNICAL REPORT REQUEST

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

- **July 6, 2007** – Revised Work Plan for Soil and Groundwater Assessment
- **45 days following end of each quarter** – Quarterly Groundwater Monitoring 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.

ELECTRONIC SUBMITTAL OF REPORTS

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).

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

Attachment: ACEH Correspondence dated September 5, 2006

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Paula Sime
Environmental Resolutions, Inc.
601 North McDowell Boulevard
Petaluma, CA 94954

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

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

ALAMEDA COUNTY
HEALTH CARE SERVICES
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

September 5, 2006

Ms. Jennifer Sedlacheck
Exxon Mobil
4096 Piedmont, #194
Oakland, CA 94611

BNY Western Trust Company
C/o Ad Valorem Tax Dept.
1 Valero Place
San Antonio, TX 78212

Mr. Robert Ehlers
Valero Energy Corporation
685 West Third Street
Hanford, CA 93230

Subject: Fuel Leak Case No. RO0002426, Former Exxon Station #7-3567, 3192 Santa Rita Road, Pleasanton, CA

Dear Ms. Sedlacheck and Mr. Ehlers:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the documents entitled, "Site Conceptual Model and Recommendation for Case Closure," dated July 10, 2006 but received by ACEH on August 15, 2006 and "Groundwater Monitoring Report, Second Quarter 2006," dated August 4, 2006. The Site Conceptual Model (SCM) summarizes existing information for the site and recommends case closure. The site is located within the Livermore-Amador Groundwater Basin approximately 425 feet north of several municipal water supply wells. The potential for discharges from the site to affect the water supply wells is a major concern. The concentrations of MTBE, TBA, and TPHd detected in groundwater at the site exceed drinking water toxicity criteria. The lower sand and gravel unit encountered at the site has significantly lower water levels than the overlying fine-grained unit, possibly reflecting the effects of pumping within the sand and gravel unit. Although the SCM indicates that groundwater concentrations are decreasing, review of the concentration graphs indicates that concentrations have decreased within the past year in several wells, but long-term trends over the past seven years appear to be stable or upward. Based on the potential for the site to affect municipal supply wells and the issues identified in our technical comments below, the case cannot be closed at this time.

This decision is subject to appeal to the State Water Resources Control Board (SWRCB), pursuant to Section 25299.39(b) of the Health and Safety Code (Thompson-Richter Underground Storage Tank Reform Act - Senate Bill 562). Please contact the SWRCB Underground Storage Tank Program at (916) 341-5851 for information regarding the appeal process.

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

TECHNICAL COMMENTS

1. **Trends in Dissolved Phase Concentrations.** The SCM indicates that dissolved-phased concentrations of TPHd, TPHg, BTEX, and MTBE show declining or stable trends at concentrations near the reporting limits, except for well MW-5, which shows fluctuating concentrations. Although dissolved phase concentrations have decreased in several wells over the last five monitoring events, the long-term trends may still be upward in several wells. As an example, the concentration of MTBE detected in groundwater from well MW-1 has decreased from 2,600 micrograms per liter (µg/L) in March 2005 to 4.6 µg/L in May 2006. However, the trend in MTBE concentrations in well MW-1 is upward over the approximately seven-year period from November 1998 to March 2005. Therefore, the long-term trend continues to be upward. The detection of 2,600 µg/L of MTBE in March 2005 was the maximum MTBE concentration detected since monitoring began at the site in November 1998. TBA concentrations in well MW-1 have increased from less than 10 µg/L in March 2003 to 114 µg/L in December 2005. MTBE concentrations detected recently in well MW-4 are higher than MTBE concentrations detected during the period from 2001 to 2004. Based on these results, the degree to which natural attenuation is reducing dissolved-phase concentrations at the site is not clear.

2. **TPH Source in Tank Pit Area.** The SCM concludes that a release most likely occurred from the old USTs prior to 1998 and a second release occurred from the dispensers, product piping, or new USTs between 1988 and 1998. The only soil samples collected in the area of the USTs were the tank pit soil samples collected from the old tank pit in 1988. No soil samples appear to have been collected in the area of the USTs installed in 1988. Due to the potential for a TPH source to exist in soil in the area of the UST tank pit, we request that you collect soil samples in the area of the new tank pit. We also request that you collect water samples from the tank pit wells to assess whether a significant release has occurred to shallow groundwater within the area of the tank pit. Please present plans to conduct this sampling in the Work Plan requested below.

3. **Potential Leaks from Dispensers.** In August 2002, MTBE was detected in soil at concentrations exceeding Environmental Screening Levels (ESLs) for groundwater protection at locations beneath the dispensers and product piping. No groundwater samples have been collected in the dispenser area or downgradient (east southeast) of the dispenser area, based on the hydraulic gradient for the upper water-bearing zone shown on Plate 3. Please present plans to collect groundwater samples to assess whether dissolved phase hydrocarbons are migrating from the dispenser area.

4. **Hydraulic Gradient.** Plate 4 (Groundwater Elevation Map, Lower Water-Bearing Zone) of the SCM and the Groundwater Monitoring Report, Second Quarter 2006, depicts a hydraulic gradient to the north for the lower zone. We do not believe Plate 4 accurately represents the hydraulic gradient within the lower zone. Well MW-7 is screened entirely within the upper fine-grained soils at the site and water levels from this well should not be included on Plate 4.

If water levels from well MW-8, which is screened entirely within the lower sand and gravel unit, are used for contouring instead of water levels from MW-7, the hydraulic gradient in the lower zone is generally to the south, towards the water supply wells. Please correct future Groundwater Elevation Maps in the reports requested below.

5. **Risk Assessment.** The risk assessment evaluated exposure pathways for direct dermal contact and ingestion of soil, volatilization from soil and transport into indoor air, and volatilization from groundwater and transport into indoor air. The baseline carcinogenic risk, expressed as an Individual Excess Lifetime Cancer Risk and baseline toxicity effects expressed as a hazard index, do not exceed target risk values for these pathways. The risk assessment does not consider the most significant exposure pathway for the site, groundwater ingestion. Please include the groundwater ingestion pathway in any future risk assessments that review cumulative risk.

6. **Well Location Maps.** The Regional Area Map (Plate 12) and Zone 7 Water Agency Well Location Map are not legible in the electronic document submitted. Please improve the quality of these maps within the electronic document or submit separate paper color copies of these documents. Please submit the revised Well Locations Maps in the Work Plan requested below.

7. **Quarterly Groundwater Monitoring.** We request that quarterly groundwater monitoring be continued at the site. Please continue to analyze the groundwater samples for TPHd, TPHg, BTEX, and fuel oxygenates and present the results in the groundwater monitoring reports requested below.

TECHNICAL REPORT REQUEST

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

- **November 15, 2006** – Quarterly Monitoring Report for the Third Quarter 2006
- **November 20, 2006** – Work Plan
- **February 15, 2007** – Quarterly Monitoring Report for the 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

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).

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: Paula Sime
Environmental Resolutions, Inc.
601 North McDowell Boulevard
Petaluma, CA 94954

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

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

ATTACHMENT B

FIELD PROTOCOL

FIELD PROTOCOL

Site Safety Plan

Field work will be performed by ERI personnel in accordance with a Site Safety Plan developed for the site. This plan describes the basic safety requirements for the subsurface investigation and the drilling of soil borings at the work site. The Site Safety Plan is applicable to personnel and subcontractors of ERI. Personnel at the site are informed of the contents of the Site Safety Plan before work begins. A copy of the Site Safety Plan is kept at the work site and is available for reference by appropriate parties during the work. The ERI geologist will act as the Site Safety Officer.

Drilling of Soil Borings

Prior to the drilling of soil borings, ERI will acquire necessary permits from the appropriate agency(ies). ERI will also contact Underground Service Alert (USA) and a private underground utility locator (per ExxonMobil protocol) before drilling to help locate public utility lines at the site. ERI will clear the proposed locations to a depth of approximately 4 or 8 feet (depending on the location), before drilling to reduce the risk of damaging underground structures.

The soil borings will be advanced using dual-tube or direct-push technology. A dual tube system consists of a large diameter (up to 3.5 inches) outer rod which serves as a temporary drive casing nested with an inner sample rods and sample barrel (up to 2.6 inches) used to obtain and retrieve the soil cores. The dual tubes are simultaneously pushed, pounded, or vibrated into the ground.

As the rods are advanced, soil is forced up inside of a three-foot sample barrel that is attached to the end of the inner rods. Soil samples are collected in stainless steel or clear plastic sample liners inside the sample barrel as both rods are advanced. After being driven three feet, the inner rods and sample barrel are retrieved, and the sample liners are removed from the sample barrel and are either package for chemical analysis or visually inspected for lithologic identification. Clean empty liners are placed into a new three foot sample barrel and attached to the rods and lowered to the bottom of the hole and the process is repeated until the total depth of the borehole is reached.

The larger outer diameter rods are left in place while the inner rod and sample barrel is retrieved. This prevents the borehole from collapsing and ensures that the soil samples are collected from the targeted depth rather than potentially be contaminated with slough from higher up in the borehole.

The drive casing, sampling rods, sample barrels, and tools will be steam-cleaned before use and between boreholes to minimize the possibility of cross-hole contamination. The rinsate will be contained in drums and stored on site. ERI will coordinate with Exxon Mobil for appropriate disposal of the rinsate.

Drilling will be performed under the observation of a field geologist, and the earth materials in the borings will be identified using visual and manual methods, and classified as drilling progresses using the Unified Soil Classification System.

Soil samples will be monitored with a photo-ionization detector (PID), which measures hydrocarbon concentrations in the ambient air or headspace above the soil sample. Field instruments such as the PID are useful for indicating relative levels of hydrocarbon vapors, but do not detect concentrations of hydrocarbons with the same precision as laboratory analyses. Soil samples selected for possible chemical analysis will be sealed promptly with Teflon® tape and plastic caps. The samples will be labeled and placed in iced storage for transport to the laboratory. Chain-of-Custody records will be initiated by the geologist in the field, updated throughout handling of the samples, and sent with the samples to the laboratory. Copies of these records will be in the final report. Cuttings generated during drilling will be placed on plastic sheeting and covered and left at the site. ERI will coordinate with Exxon Mobil for the soil to be removed to an appropriate disposal facility.

Grab Groundwater Sample Collection through Direct Push Rods

At first encountered groundwater, the sample barrel and inner rods will be removed from the borehole. Small diameter well casing with 0.010" slotted well screen may be installed to facilitate the collection of groundwater samples. The temporary well is lowered through the drive casing and then the drive casing is pulled up approximately 0.5 feet to 2 feet to expose the slotted interval and allow groundwater to flow into the borehole. Groundwater samples may then be collected from within the drive casing with a new disposable bailer or peristaltic pump. When using dual-wall direct-push technology, the outer rods seal off upper portions of the aquifer while coring to the lower depths. Groundwater samples from lower depths can be collected by removing the inner coring rods while the outer rods remain in place, and attaching drive rods to a groundwater sampling probe such as the HydroPunch® (HP), which is then inserted inside the outer rods of the dual-wall equipment. A 5-foot long disposable screen and tip is inserted into the HP-II, the HP-II is pushed to the desired depth and the outer body of the HP-II is retracted. The disposable screen is exposed to the ground water and a ¾-inch inner-diameter bailer is lowered through the rods and into the screened zone for sample collection.

Grab Groundwater Sampling

The Hydropunch® sampler (or similar) provides a method for collecting groundwater samples at multiple depths in the same borehole. To sample groundwater, the sample tool is pushed to the selected depth beneath the water table, then withdrawn to expose an inlet screen. Alternatively, a temporary casing is placed within the casing. A water sample is then collected and promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain of Custody Record, to a California-certified laboratory.

Borehole Grouting

After soil and grab groundwater sampling have been completed, all boreholes will be backfilled with cement grout containing less that 5 percent pure sodium bentonite. The grout will be pumped through a tremie pipe positioned at the bottom of the boreholes.