

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

RECEIVED

2:26 pm, Jun 29, 2007

Alameda County
Environmental Health

ExxonMobil
Refining & Supply

June 4, 2007

Mr. Steven Plunkett
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

RE: Former Exxon RAS #7-0238/2200 East 12th Street, Oakland California.

Dear Mr. Plunkett:

Attached for your review and comment is a copy of the letter report entitled *Addendum to Work Plan for Additional Soil and Groundwater Investigation*, dated June 4, 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 or report 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 Addendum to Work Plan for Additional Soil and Groundwater Investigation, dated June 4, 2007

cc: w/ attachment
Mr. Chuck Headlee, California Regional Water Quality Control Board, San Francisco Bay Region
Mr. Robert C. Ehlers, M.S., P.E., The Valero Companies, Environmental Liability Management

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



Southern California
Northern California
Pacific Northwest
Southwest
Texas
Montana

June 4, 2007
ERI 229303.W03

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

SUBJECT Addendum to Work Plan for Additional Soil and Groundwater Investigation
Former Exxon Service Station 7-0238
2200 East 12th Street, Oakland, California

Ms. Sedlachek:

At the request of ExxonMobil Oil Corporation (ExxonMobil), Environmental Resolutions, Inc. (ERI) has prepared this Addendum to the *Work Plan for Additional Soil and Groundwater Investigation* (Work Plan), dated April 10, 2007, in response to a letter from the Alameda County Health Care Services Agency (the County) dated May 24, 2007 (Attachment A).

SITE BACKGROUND

The site is located on the eastern corner of 22nd Avenue and East 12th Street in Oakland, California (Plate 1). The locations of the former and current underground storage tanks (USTs), dispenser islands, groundwater monitoring wells, and select site features are shown on Plate 2. Groundwater monitoring has been conducted at the site since June 1988.

RESPONSE TO AGENCY COMMENTS AND ADDENDUM TO WORK PLAN FOR OFF-SITE DELINEATION

In the May 24, 2007 correspondence, the County requested the following specific information. The County's requests are paraphrased in bold text, and ERI's responses follow.

Soil Boring Locations and Sampling: The proposed locations for borings SB12 through SB18 are acceptable; however, a review of historical data indicates that the proposed soil borings have the same ID numbers as soil borings installed in a previous investigation. Please adjust identifiers for your proposed boring locations within the text and on the proposed boring locations figure. Move the location of SB19 to approximately 30-feet northwest of monitoring well MW9H.

Identifiers for proposed boring locations SB12 through SB19 have been changed to DP1 through DP8. The location for SB19 has been adjusted as requested. The adjusted location is shown on Plate 3. The following sections from the Work Plan have been amended to reflect these changes.

PROPOSED INVESTIGATION

Soil and Groundwater Assessment

To investigate vertical distribution of dissolved total petroleum hydrocarbons as gasoline (TPHg), benzene, methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA) in soil and groundwater, ERI proposes to advance one soil boring (DP1) in the vicinity of the former used-oil tank.

Environmental Resolutions, Inc.

601 North McDowell Blvd., Petaluma, CA 94954-2312 | Tel: 707.766.2000 | Fax: 707.789.0414 | Contractor # A/C10-611383

To investigate lateral distribution of dissolved TPHg, benzene, MTBE, and TBA in soil and groundwater, ERI proposes to advance three soil borings in the vicinity of the site as follows:

- One soil boring (DP2) southwest of well MW9A.
- One soil boring (DP7) at 2121 East 12th Street west-southwest of well MW9H and downgradient of the site.
- One soil boring (DP8) along East 12th Street northwest of well MW9H and downgradient of the site.

To investigate the vertical and lateral distribution of dissolved TPHg, benzene, MTBE, and TBA in soil and groundwater, ERI proposes to advance four soil borings in the vicinity of the site as follows:

- One soil boring (DP3) southwest of well MW9I.
- One soil boring (DP4) west of well MW9B.
- Two soil borings (DP5 and DP6) beneath the elevated BART tracks southwest of well MW9I.

Because of interference from crossing subsurface utilities, the location for boring DP4 was moved to the northwest area of the intersection of East 12th Street and 22nd Avenue. Proposed soil boring locations are shown on Plate 3.

Investigation Tasks

Task 1: Permitting and Access

ERI will obtain soil boring permits from the Alameda County Public Works Department (Public Works) prior to advancing borings DP1 through DP8. ERI will obtain an approved Traffic Control Plan and Excavation and Obstruction Permits from the City of Oakland (the City) to advance borings DP2 through DP6 and DP8 in the City right-of-way. ERI will negotiate access with the property owner of 2121 East 12th Street to advance soil boring DP7.

Task 3: Direct-Push Soil Borings

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

- Obtain the services of a licensed well driller and observe the advancement of borings DP1 through DP8 using direct-push equipment. Soil borings will be advanced to a maximum depth of approximately 30 feet below ground surface (fbgs).
- Collect and visually examine soil samples from each boring to construct a boring log and screen soil samples with a photo-ionization detector (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.
- Fill the boring with cement/bentonite grout, upon completion of sampling, and refinish the surface to match the surrounding ground conditions.
- 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 total petroleum

hydrocarbons as diesel (TPHd) and TPHg using Environmental Protection Agency (EPA) Method 8015B and BTEX, oxygenated compounds (MTBE, TBA, tertiary amyl methyl ether [TAME], ethyl tertiary butyl ether [ETBE], and di-isopropyl ether [DIPE]), and lead scavengers (1,2-dichloroethane [1,2-DCA] and 1,2-dibromoethane [EDB]) using EPA Method 8260B.

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

- Collect grab groundwater samples from first-encountered groundwater through installation of a temporary polyvinyl chloride (PVC) well screen.
- Collect depth-discrete grab groundwater samples from water-bearing intervals using a Hydropunch[®] (or similar) sampling device in an adjacent boring.
- Fill the borings with cement/bentonite grout, upon completion of sampling, and refinish the surface to match the surrounding ground conditions.
- 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 and BTEX, oxygenated compounds (MTBE, TBA, TAME, ETBE, DIPE), and lead scavengers (1,2-DCA and EDB) using EPA Method 8260B.

Soil Boring Locations and Sampling: Add one additional soil boring between monitoring well MW9H and proposed soil boring SB17.

On June 1, 2007 ERI performed a site walkthrough to determine the feasibility of placing the requested soil boring at this location. The requested location is in the center of the intersection of East 12th Street and 22nd Avenue, beneath the elevated BART train. During the site walkthrough, ERI noted numerous utility vaults in all four lanes of 22nd Avenue transecting East 12th Street. Pavement scarring suggests that the utilities are running east to west beneath all four lanes of 22nd Avenue. Photos of the vaults are included in Attachment B.

This intersection serves as an on and off ramp to Interstate 880. Lane closures within the intersection would greatly impact Interstate 880 traffic and traffic in both directions of East 12th Street. More importantly, because of the high volume of traffic at this location, working in the middle of this intersection poses a significant safety hazard to personnel involved in the field work.

Given the network of subsurface utilities and the traffic concerns at the intersection of East 12th Street and 22nd Avenue and Interstate 880, placement of a boring at that location is not feasible. However, the data obtained from proposed borings DP3, DP7, and DP8, in conjunction with data from groundwater monitoring well MW9H, should provide sufficient data to delineate the lateral and vertical extent of petroleum hydrocarbons in soil and groundwater northwest of the site.

Technical Report Request: Please submit the soil and groundwater investigation results by August 1, 2007.

Prior to advancing borings DP2 through DP6 and DP8 in East 12th Street (City of Oakland right-of-way), ERI must complete the following tasks:

Step 1

Obtain an approved Traffic Control Plan from the City for permission to mark the boring locations on the pavement for coordination with Underground Service Alert (USA). The City's turn around time for

a Traffic Control Plan is a minimum of two weeks; however, the City does not guarantee this turn around time and states it may be longer.

Step 2

Once the approved Traffic Control Plan is obtained, ERI must obtain an Obstruction Permit from the City to enter the street, with the approved traffic control measures in place, to mark the boring locations for USA. The Obstruction Permit is obtained over the counter and the approved Traffic Control Plan must be submitted with the Obstruction Permit application materials.

Step 3

After receipt of the approved Traffic Control Plan and Obstruction Permit, ERI may mark the boring locations in the street for coordination with USA.

Step 4

Because there are numerous known underground utilities beneath East 12th Street in close proximity to the proposed boring locations, a site meeting with the associated utility owners will be necessary, in accordance with USA regulations.

Step 5

If boring locations must be moved to avoid conflict with existing underground utilities, ERI must submit a second Traffic Control Plan to the City for the revised locations. The minimum two week turn around time applies.

Step 6

Regardless of whether the borings are moved or not, subsequent to meeting the USA requirements for utility clearance, ERI must obtain a second Obstruction Permit and an Excavation Permit from the City to perform the soil boring work scope. These permits are obtained over the counter and require submittal of the approved Traffic Control Plan with the application materials.

Step 7

ERI will also obtain soil boring permits from the Alameda County Public Works Agency to advance soil borings DP1 through DP8; however, these permits can be obtained concurrently during the encroachment permitting process with the City.

ERI will diligently pursue the permitting and coordination of the proposed investigation; however, because of the encroachment permit approval process and time frames set by the City, the County's deadline of 8 weeks for submittal of the results report does not allow sufficient time to complete the permitting, coordination, field investigation, laboratory analysis of acquired samples, review of the data, and preparation of a comprehensive report. ERI requests to amend the investigation schedule as follows.

Proposed Schedule of Investigation Tasks

Task 1: Permitting and Access

ERI submitted an Application for Traffic Control Plan to the City on June 6, 2007, to allow USA marking of proposed borings DP2 through DP6 and DP8 (Step 1). Upon receipt of the Traffic Control Plan, ERI will

complete Steps 2 through 7. Concurrently with the permitting processes previously described, ERI will negotiate access to advance boring DP7 on private property.

Task 2: Subsurface Clearance and Direct-Push Soil Borings

Upon finalizing boring locations and receipt of the City Traffic Control Plan, Obstruction Permit, and Excavation Permit for the soil boring field work, ERI will oversee borehole clearance activities for borings DP1 through DP6 and DP8 using hand tools and/or vacuum excavation equipment and commence the soil boring work scope. If access to the private property at 2121 East 12th Street is granted, boring DP7 will be advanced during this field mobilization; however, if access negotiations are not yet completed, boring DP7 will be advanced at a later date.

Task 3: Laboratory Analysis, Data Review, Land Survey, and Report Preparation

Laboratory analytical results will be available approximately 2 weeks from the date of completion of field activities. ERI will coordinate with a licensed land surveyor to survey the boring locations and adjacent landmarks to create an extended site plan for the site. ERI will review the analytical results and evaluate the data with respect to the existing Site Conceptual Model for the site, and prepare a comprehensive Updated Site Conceptual Model report that will include tabulated analytical data, analytical results maps, cross sections, isoconcentration maps, and a discussion and evaluation of the data compiled to date for the site.

Task 4: Waste Disposal

At the completion of field activities, ERI will collect samples from the stockpiled cuttings and receive analytical results approximately two weeks from this date. Waste disposal is anticipated to occur within approximately three weeks after receipt of the stockpile analytical results. Disposal documentation will be included in the technical report.

Task 5: Technical Report

Thirty days after removing the waste materials from the site, ERI will submit the Updated Site Conceptual Model report described in Task 3.

Other tasks and sections described in ERI's Work Plan remain unchanged by this Addendum.

DOCUMENT DISTRIBUTION

ERI recommends that copies of this report be forwarded to the following:

Mr. Steven Plunkett
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

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

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

Sincerely,
Environmental Resolutions, Inc.

Handwritten signature
for:
Rebekah Westrup
Senior Staff Geologist

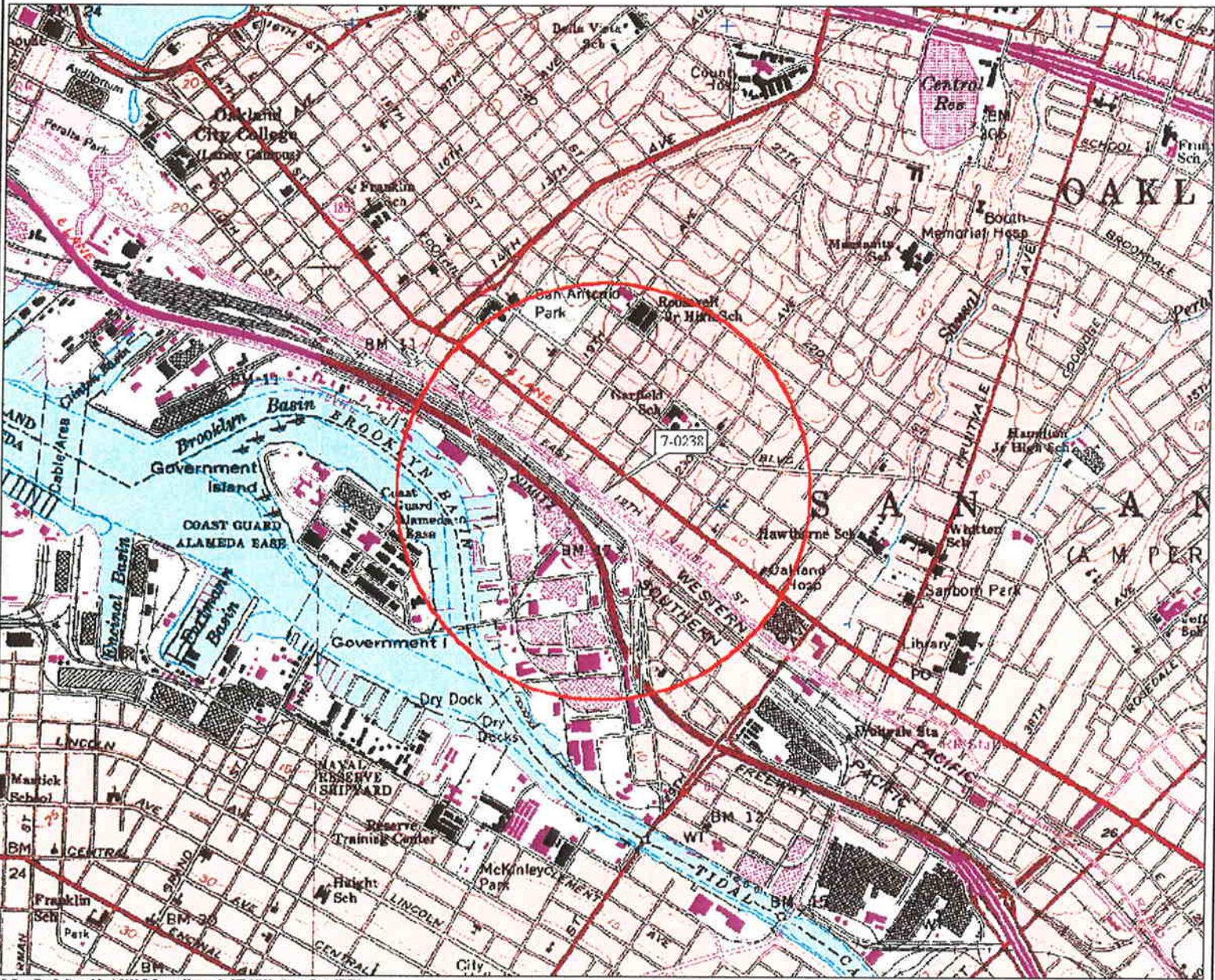
Handwritten signature

John B. Bobbitt
P.G. 4313



Attachments: Plate 1: Site Vicinity Map
Plate 2: Generalized Site Plan
Plate 3: Proposed Soil Boring Locations

Attachment A: Agency Correspondence
Attachment B: Utility Vault Photos



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 44096 Source Data: USGS | SSU II Scale: 1:19,200 Detail 1:50 Datum: NGS84

FN 2293TOPO

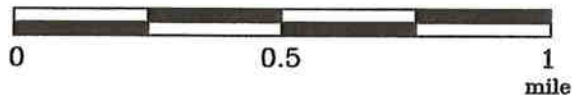
EXPLANATION



1/2-mile radius circle



APPROXIMATE SCALE



SOURCE:
Modified from a map
provided by
DeLorme 3-D TopoQuads

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

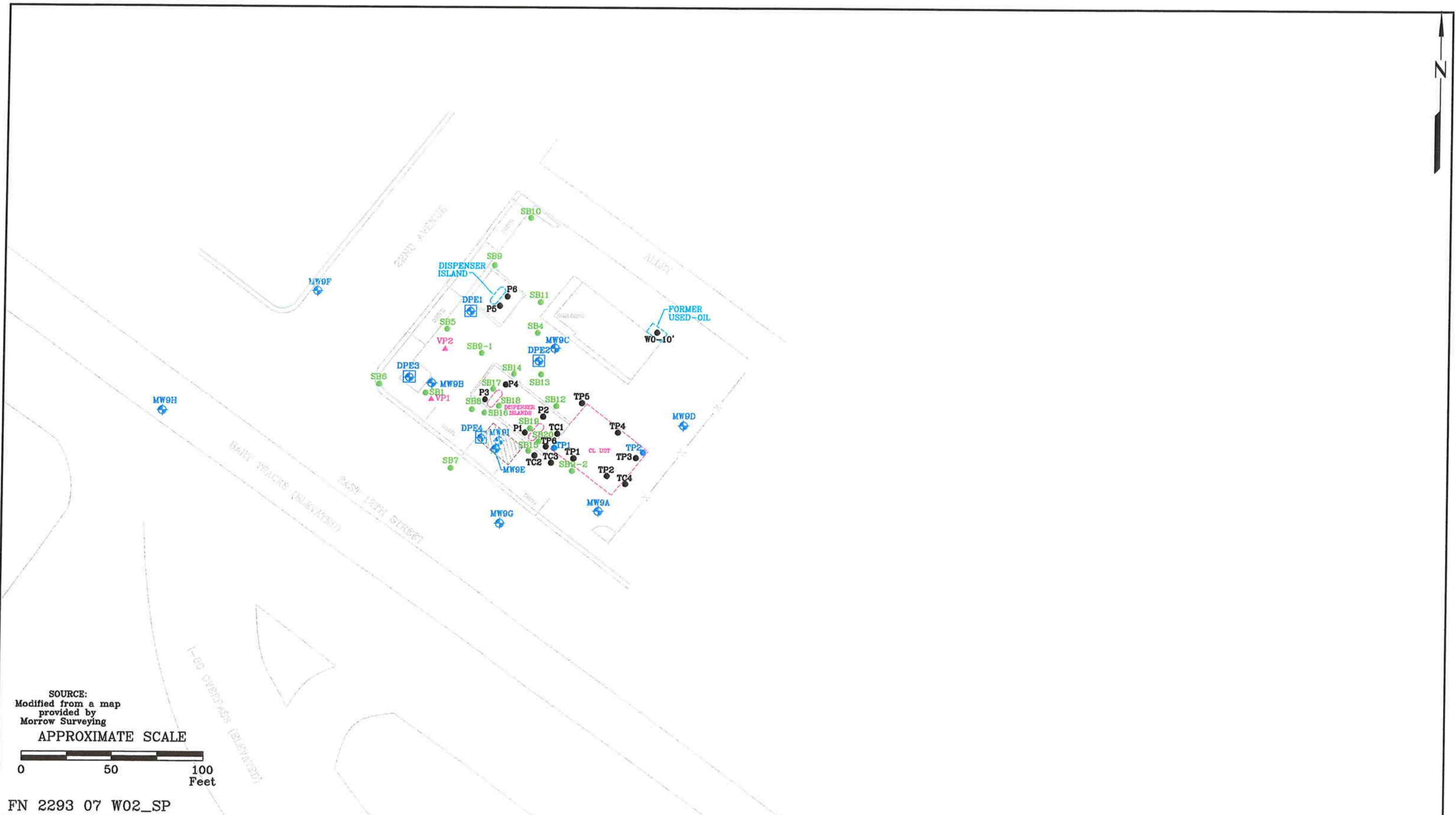
PROJECT NO.

2293

PLATE

1





SOURCE:
Modified from a map
provided by
Morrow Surveying

APPROXIMATE SCALE

FN 2293 07 W02_SP



GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

EXPLANATION

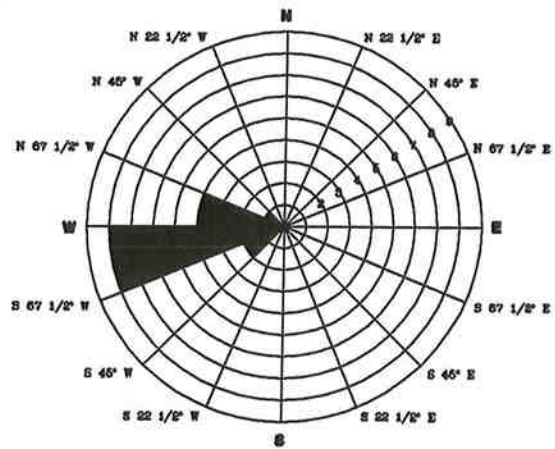
- MW9I Groundwater Monitoring Well
- TP2 Observation Well
- DPE4 Dual-Phase Extraction Well
- VP2 Soil Vapor Extraction Well
- SB11 Soil Boring
- MW9E Destroyed Groundwater Monitoring Well

NOTE:
Former Groundwater Monitoring Well
MW9E was in the current location
of MW9I.

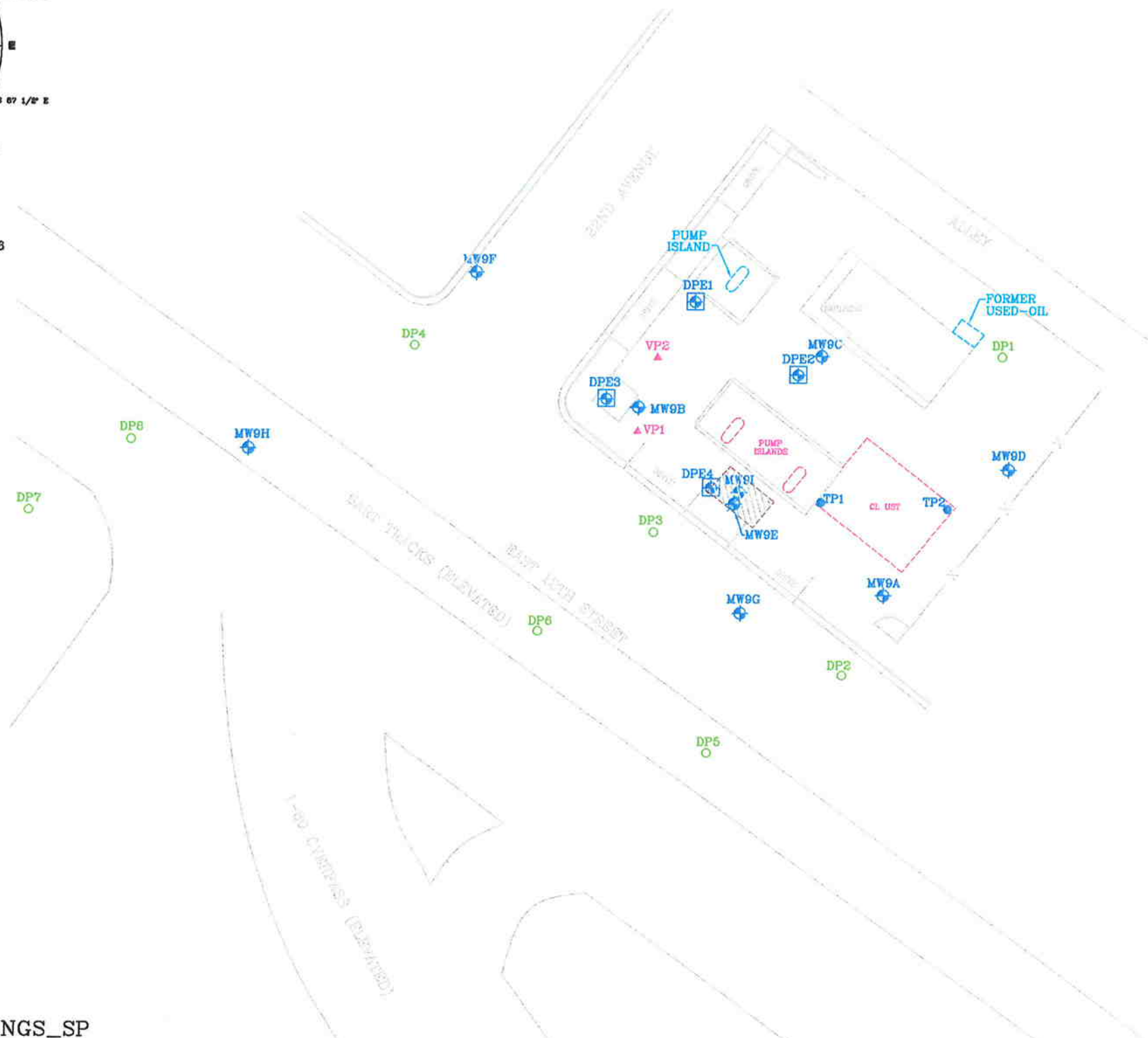
Excavation

PROJECT NO.
2293

PLATE
2



**GROUNDWATER FLOW DIRECTION
ROSE DIAGRAM**
January 10, 2003 - December 15, 2006



SOURCE:
Modified from a map
provided by
Morrow Surveying
APPROXIMATE SCALE
0 50 100
Feet

FN 2293 07 W02 PROP BORINGS_SP



PROPOSED SOIL BORING LOCATIONS
FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

EXPLANATION

- MW9I
Groundwater Monitoring Well
- TP2
Observation Well
- DPE4
Dual-Phase Extraction Well
- VP2
Soil Vapor Extraction Well
- MW9E
Destroyed Groundwater Monitoring Well
- DP6
Proposed Soil Boring

NOTE:
Former Groundwater Monitoring Well
MW9E was in the current location
of MW9I.
Excavation

PROJECT NO.
2293
PLATE
3

ATTACHMENT A
REGULATORY CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



RECEIVED
MAY 29 2007
BY:.....

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

May 24, 2007

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

Mr. Robert Ehlers
Valero Refining Company
PO Box 696000
San Antonio, TX 78269

Mr. Satya Sinha
Chevron Environmental Management Company
6001 Bollinger Canyon Rd. K2256
San Ramon, CA 94583-2324

Subject: Fuel Leak Case No. RO0000390, Exxon #7-0238, 2200 E 12th Street, Oakland CA

Dear Ms. Sedlachek and Messrs. Ehlers and Sinha

Alameda County Environmental Health (ACEH) staff have reviewed the fuel leak case file and the reports entitled, "Work Plan for Soil and Groundwater Investigation," dated April 10, 2007 and "Site Conceptual Model," dated March 14, 2007 prepared by Environmental Resolutions Inc (ERI). The scope of work as proposed in the Work Plan recommends the installation of seven soil boring down gradient of the former USTs and fuel dispenser island. ACEH generally concurs with the scope of work as recommended in the Work Plan provided the technical comments discussed below are implemented prior to the start of field work.

We request that you perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to steven.plunkett@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

- 1. Soil Boring Locations and Sampling.** Review of Plate 16 (Proposed Soil Boring Locations) from the Work Plan indicate the proposed soil borings have the same ID numbers as soil borings installed in a previous soil and groundwater investigation. Please rename the soil borings with unique identification numbers to distinguish them from soil borings installed during previous investigations. In addition, ACEH requests that one additional soil boring be located between SB17 and MW9H and soil boring SB19 should be moved from the current location to approximately 30 northwest of MW9H. In addition, ACEH generally agrees with the soil sample analysis recommended in the Work Plan.
- 2. Site Conceptual Model.** ACEH appreciates the submission of the Site Conceptual Model (SCM) for your site. After completion of the soil and groundwater investigation, please update the SCM with the results from the soil and groundwater investigation and prepare additional

cross sections that include the new soil boring locations and soil and groundwater analytical results.

TECHNICAL REPORT REQUEST

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

August 1, 2007 –Soil and Groundwater Investigation 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

Jennifer Sedlachek
May 22, 2007
Page 3

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.

Should you have any questions, please call me at (510) 383-1767.

Sincerely,



Steven Plunkett
Hazardous Materials Specialist

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

Donna Drogos, ACEH, Steven Plunkett, ACEH, File

ATTACHMENT B
UTILITY VAULT PHOTOS



Intersection of 22nd Ave and E 12th Street.
Picture taken from southwest corner of the intersection
western most edge looking north at southbound E 12th Street.



Intersection of 22nd Ave and E 12th Street.
Picture taken from southwest corner of the intersection
looking northeast at southbound E 12th Street.



Intersection of 22nd Ave and E 12th Street.
Picture taken from center median of E 12th Street
looking northeast toward northbound E 12th



Intersection of 22nd Ave and E 12th Street.
Picture taken from center median of E 12th Street
looking northeast toward the northeastern corner of intersection.