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By Alameda County Environmental Health at 2:37 pm, Feb 26, 2014



Well Destruction Report

Former BP Service Station #11102
100 MacArthur Boulevard
Oakland, California
ACEH Case #RO0000456

To Whom It May Concern:

"I declare that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Sincerely,

ARCADIS U.S., Inc.

A handwritten signature in black ink, appearing to read "H.E. Phillips".

Hollis E. Phillips, PG (No. 6887)
Project Manager/Principal Geologist

ARCADIS U.S., Inc.
100 Montgomery Street
Suite 300
San Francisco
California 94104
Tel 415.374.2744
Fax 415.374.2745
www.arcadis-us.com

ENVIRONMENTAL

Date:
February 26, 2014

Contact:
Hollis E. Phillips

Phone:
415.432.6903

Email:
Hollis.phillips@arcadis-us.com

Our ref:
GP09BPNA.C111.Q0000

State Water Resources Control Board
UST Closures
1001 I Street
Sacramento, CA 95814

ARCADIS U.S., Inc.
100 Montgomery Street
Suite 300
San Francisco
California 94104
Tel 415.374.2744
Fax 415.374.2745
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Subject:

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ENVIRONMENTAL

To Whom It May Concern:

Date:
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On behalf of BP West Coast Products, LLC (BP West), ARCADIS U.S., Inc. (ARCADIS) is pleased to submit this Well Destruction Report which documents the destruction of four groundwater monitoring wells at the Former British Petroleum (BP) Station No. 11102 (Site) located at 100 MacArthur Boulevard, Oakland, California (**Figure 1**).

Contact:
Hollis E. Phillips

Phone:
415.432.6903

Email:
Hollis.phillips@arcadis-us.com

Destruction of the site wells was requested in the *UST Case Closure Review Summary Report* submitted to Alameda County Environmental Health Department (ACEH) on July 16, 2013. The Site was petitioned to the State Water Resources Control Board for closure and closure was approved in *Order WQ 2013-097-UST*, dated September 30, 2013 (**Attachment A**).

Our ref:
GP09BPNA.C111.Q0000

Prior to conducting the field activities, ARCADIS obtained well destruction permits W2013-0989 through W2013-0992 from the Alameda County Public Works Agency (ACPWA) for wells MW-1, MW-2, MW-3, and MW-4 (**Figure 2**). Additionally, ARCADIS obtained encroachment permit number 0413-6SV 2187 from the State of California Department of Transportation (Caltrans) for the destruction of well MW-4. Copies of the permits are included as **Attachment B**.

ARCADIS contracted Gregg Drilling and Testing, Inc. (Gregg) of Martinez, California to destroy the wells. Gregg is a California-licensed drilling contractor (C57 License No. 485165). No traffic control was necessary as the work did not disrupt the public right-of-way. The monitoring wells were destroyed on January 30, 2013.

Mr. Steve Miller from the ACPWA provided inspection and oversight of the well destruction activities. The wells were destroyed in accordance with ACPWA permit requirements. Neat cement grout was placed in each well from the bottom of the well to ground surface and placed under 25 pounds per square inch (psi) of pressure for 5 minutes under the direct supervision of the ACPW inspector. All well boxes were removed. The wells were completed to match the surrounding ground surface conditions.

Table 1 provides well destruction details. Copies of the Well Completion Reports submitted to the Department of Water Resources are included in **Attachment C**.

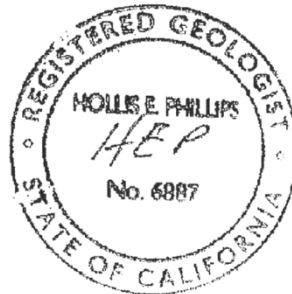
With the completion of the above mentioned well destruction activities, ARCADIS does not believe that there are any remaining issues associated with ACEH Case No. RO0000456; therefore, this site should be considered closed with regard to the previous environmental issues associated with this site. If you have any questions or need additional information regarding this site please contact Hollis Phillips at hollis.phillips@arcadis-us.com or 415.432.6903. Thank you for your assistance with closing Former BP Station No. 11102.

Sincerely,

ARCADIS U.S., Inc.



Hollis E. Phillips, PG (No. 6887)
Project Manager/Principal Geologist



Attachments

- Figure 1 – Site Location Map
- Figure 2 – Site Plan
- Table 1 – Neat Cement Grout Estimated Volumes
- Attachment A – Order – WQ – 2013-097 – UST
- Attachment B – Well Destruction Permits
- Attachment C – Well Completion Reports

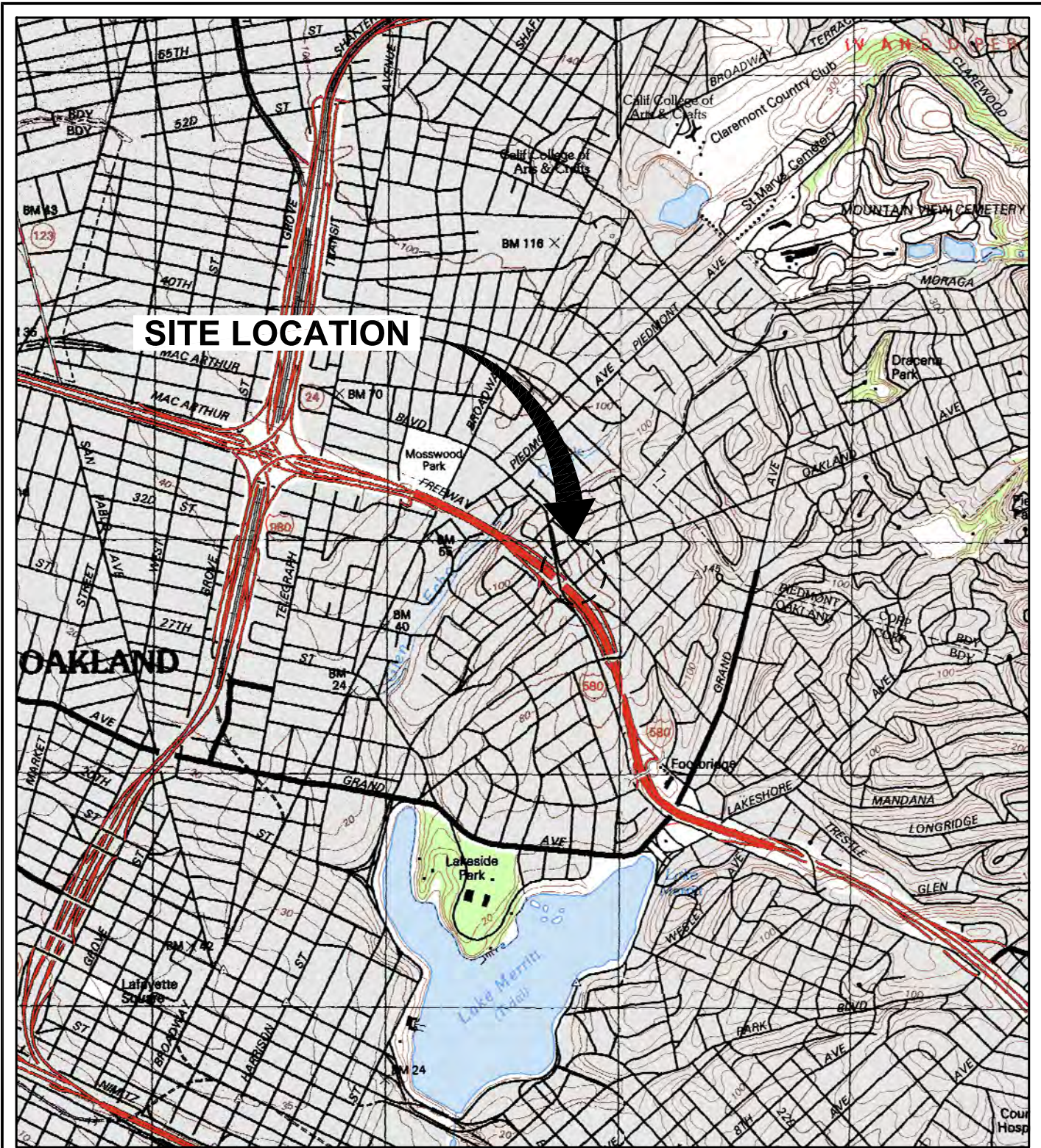
Copies:

Geotracker upload/ACEH upload

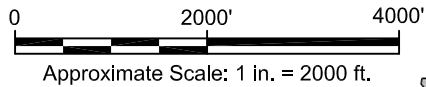


FIGURES

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD: PIC: S.GLENN PM: H.PHILLIPS TM: C.MEYER LVR(OPTION#):OFF=REF
 G:ENV/CAD/Petaluma/CAD/CP98/PNACI1180000/figure_1_Site_Location_Map.dwg LAYOUT: 1 SAVED: 9/23/2009 11:40 AM ACADVER: 17.15 (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 9/23/2009 12:24 PM BY: HARRIS, JESSICA



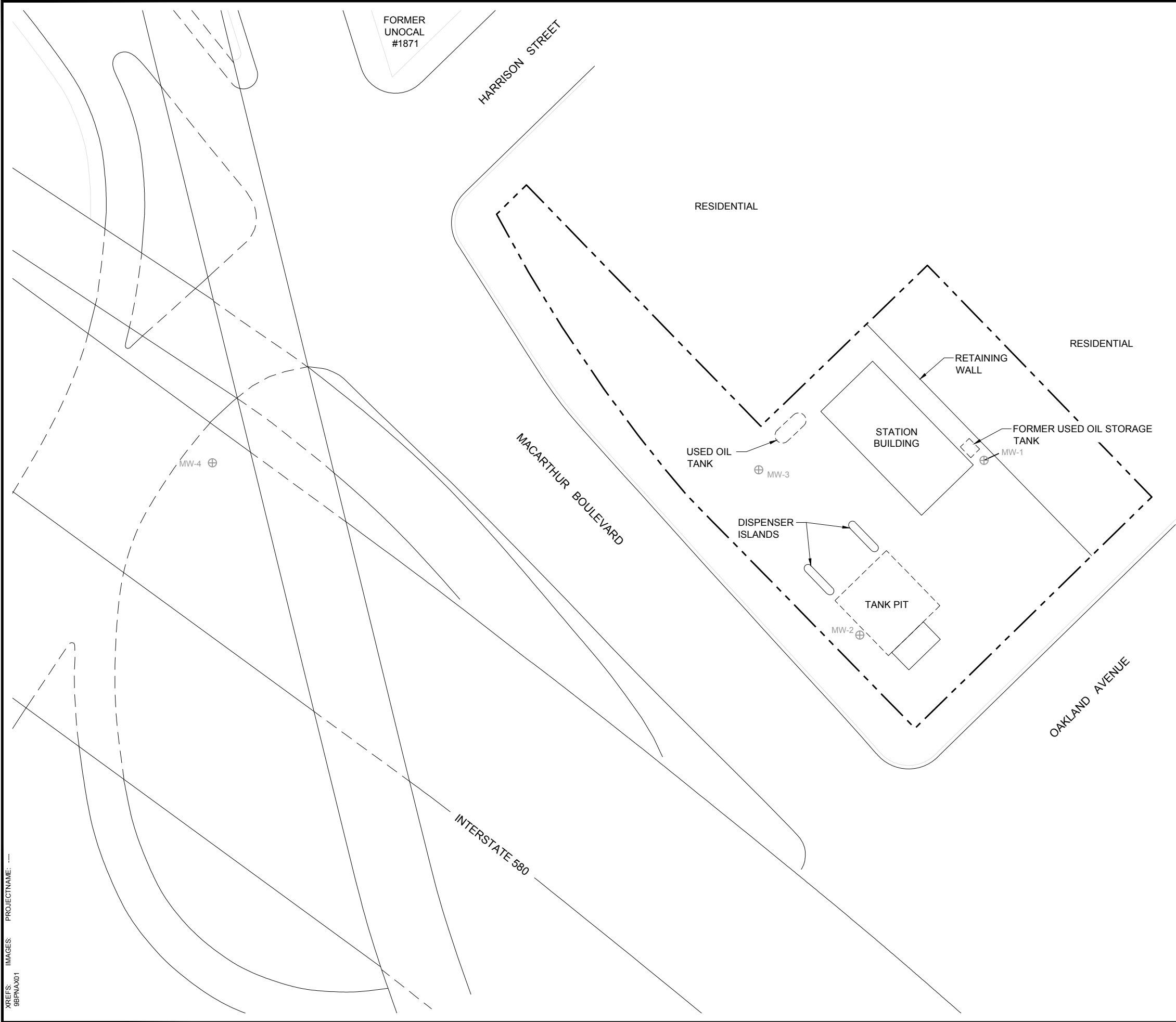
REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND WEST, CA., 1993 AND EAST, 1997.



FORMER BP SERVICE STATION #11102 100 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA	
SITE LOCATION MAP	
	FIGURE 1

CITY:(Read) DIV:(Group:Read) DB:(Read) LD:(Opt) PIC:(Opt) PM:(Read) TM:(Opt) Lyr:(Opt) ON="OFF" REF="G:\ENVCAD\Emeryville\ACT\GF09BPNAC111B0000\Closure_Report\DWG\GF09BPNAC11-B02.dwg LAYOUT: 2 SAVED: 2/13/2014 1:44 PM ACADVER: 18.15 (LMS TECH) PAGES: 18 OF 18 PLOT: 2/13/2014 1:46 PM BY: REYES, ALEC

XREFS: 98PNA01 IMAGES: PROJECTNAME: ---

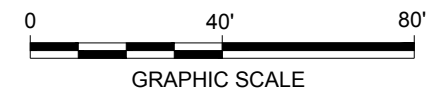


LEGEND:

- PROPERTY BOUNDARY
- ⊕ ABANDONED BP MONITORING WELL LOCATION

NOTES:

1. BASE MAP PREPARED BY DIGITIZING A HARD COPY OF A DRAWING BY "BROADBENT AND ASSOCIATES, INC.", TITLED "SITE LAYOUT PLAN WITH PROPOSED SOIL BORING AND WELL LOCATIONS", DATED 3/9/09, AT A SCALE OF 1"=40'
2. ALL LOCATIONS ARE APPROXIMATE.



FORMER BP SERVICE STATION #11102
100 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

SITE MAP



FIGURE
2



TABLE

Table 1
Neat Cement Grout Estimated Volumes
CA-11102
100 MacArthur Boulevard, Oakland, California

Well ID	Total Depth (feet btoc)	Casing Diameter (inches)	Boring Diameter (inches)	Neat Cement Grout Estimated Volume (gallons)	Neat Cement Grout Actual Volume (gallons)	Vault (Y/N)	Completion Type	Notes
MW-1	31.81	4	10	26.96	35	Y	conc. dyed black	
MW-2	32.15	4	10	27.25	35	Y	conc. dyed black	
MW-3	32.28	4	10	27.36	35	Y	conc. dyed black	
MW-4	19.62	2	8	4.16	6	Y	dirt	Under freeway overpass



Attachment A

Order WQ 2013-097-UST

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WQ 2013-097 – UST

In the Matter of Underground Storage Tank Case Closure

**Pursuant to Health and Safety Code Section 25299.39.2 and the Low Threat
Underground Storage Tank Case Closure Policy**

BY THE EXECUTIVE DIRECTOR¹:

Pursuant to Health and Safety Code section 25299.39.2, the Manager of the Underground Storage Tank Cleanup Fund (Fund) recommends closure of the underground storage tank (UST) case at the site listed below.² The name of the Fund claimant, the Fund claim number, the site name and the applicable site address are as follows:

Conoco Phillips

H & Song Son Myong

BP/ARCO

ExxonMobil

Claim No. 5518

BP Station #11102

100 MacArthur Boulevard, Oakland

Alameda County Environmental Health Department

I. STATUTORY AND PROCEDURAL BACKGROUND

Section 25299.39.2 directs the Fund manager to review the case history of claims that have been active for five years or more (five-year review), unless there is an objection from the UST owner or operator. This section further authorizes the Fund Manager to make recommendations to the State Water Resources Control Board (State Water Board) for closure of a five-year-review case if the UST owner or operator approves. In response to a recommendation by the Fund Manager, the State Water Board, or in certain cases the State

¹ State Water Board Resolution No. 2012-0061 delegates to the Executive Director the authority to close or require the closure of any UST case if the case meets the criteria found in the State Water Board's Low Threat Underground Storage Tank Case Closure Policy adopted by State Water Board Resolution No. 2012-0016.

² Unless otherwise noted, all references are to the Health and Safety Code.

Water Board Executive Director, may close a case or require the closure of a UST case.

Closure of a UST case is appropriate where the corrective action ensures the protection of human health, safety, and the environment and where the corrective action is consistent with:

- 1) Chapter 6.7 of Division 20 of the Health and Safety Code and implementing regulations;
- 2) Any applicable waste discharge requirements or other orders issued pursuant to Division 7 of the Water Code; 3) All applicable state policies for water quality control; and 4) All applicable water quality control plans.

The Fund Manager has completed a five-year review of the UST case identified above, and recommends that this case be closed. The recommendation is based upon the facts and circumstances of this particular UST case. A UST Case Closure Review Summary Report has been prepared for the case identified above and the bases for determining compliance with the Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closures (Low-Threat Closure Policy or Policy) are explained in the Case Closure Review Summary Report.

A. Low-Threat Closure Policy

In State Water Board Resolution No. 2012-0016, the State Water Board adopted the Low Threat Closure Policy. The Policy became effective on August 17, 2012. The Policy establishes consistent statewide case closure criteria for certain low-threat petroleum UST sites. In the absence of unique attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents, cases that meet the general and media-specific criteria in the Low-Threat Closure Policy pose a low threat to human health, safety and the environment and are appropriate for closure under Health and Safety Code section 25296.10. The Policy provides that if a regulatory agency determines that a case meets the general and media-specific criteria of the Policy, then the regulatory agency shall notify responsible parties and other specified interested persons that the case is eligible for case closure. Unless the regulatory agency revises its determination based on comments received on the proposed case closure, the Policy provides that the agency shall issue a closure letter as specified in Health and Safety Code section 25296.10. The closure letter may only be issued after the expiration of the 60-day comment period, proper destruction or maintenance of monitoring wells or borings, and removal of waste associated with investigation and remediation of the site.

Health and Safety Code section 25299.57, subdivision (l)(1) provides that claims for reimbursement of corrective action costs that are received by the Fund more than 365 days after the date of a closure letter or a Letter of Commitment, whichever occurs later, shall not be reimbursed unless specified conditions are satisfied. A Letter of Commitment has already been

issued on the claim subject to this order and the respective Fund claimant, so the 365-day timeframe for the submittal of claims for corrective action costs will start upon the issuance of the closure letter.

II. FINDINGS

Based upon the UST Case Closure Review Summary Report prepared for the case attached hereto, the State Water Board finds that corrective action taken to address the unauthorized release of petroleum at the UST release site identified as:

Claim No. 5518

BP Station #11102

ensures protection of human health, safety and the environment and is consistent with Chapter 6.7 of Division 20 of the Health and Safety Code and implementing regulations, the Low-Threat Closure Policy and other water quality control policies and applicable water quality control plans.

Pursuant to the Low-Threat Closure Policy, notification has been provided to all entities that are required to receive notice of the proposed case closure, a 60-day comment period has been provided to notified parties, and any comments received have been considered by the Board in determining that the case should be closed.

The UST case identified above may be the subject of orders issued by the Regional Water Quality Control Water Board (Regional Water Board) pursuant to Division 7 of the Water Code. Any orders that have been issued by the Regional Water Board pursuant to Division 7 of the Water Code, or directives issued by a Local Oversight Program agency for this case should be rescinded to the extent they are inconsistent with this Order.

III. ORDER

IT IS THEREFORE ORDERED that:

- A. The UST case identified in Section II of this Order, meeting the general and media-specific criteria established in the Low-Threat Closure Policy, be closed in accordance with the following conditions and after the following actions are complete. Prior to the issuance of a closure letter, the Fund claimant is ordered to:

1. Properly destroy monitoring wells and borings unless the owner of real property on which the well or boring is located certifies that the wells or borings will be maintained in accordance with local or state requirements;
 2. Properly remove from the site and manage all waste piles, drums, debris, and other investigation and remediation derived materials in accordance with local or state requirements; and
 3. Within six months of the date of this Order, submit documentation to the regulatory agency overseeing the UST case identified in Section II of this Order that the tasks in subparagraphs (1) and (2) have been completed.
- B. The tasks in subparagraphs (1) and (2) of paragraph (A) are ordered pursuant to Health and Safety Code section 25296.10 and failure to comply with these requirements may result in the imposition of civil penalties pursuant to Health and Safety Code section 25299, subdivision (d)(1). Penalties may be imposed administratively by the State Water Board or Regional Water Board.
- C. Within 30 days of receipt of proper documentation from the Fund claimant that requirements in subparagraphs (1) and (2) of paragraph (A) are complete, the regulatory agency that is responsible for oversight of the UST case identified in Section II of this Order shall notify the State Water Board that the tasks have been satisfactorily completed.
- D. Within 30 days of notification from the regulatory agency that the tasks are complete pursuant to paragraph (C), the Deputy Director of the Division of Financial Assistance shall issue a closure letter consistent with Health and Safety Code section 25296.10, subdivision (g) and upload the closure letter and UST Case Closure Review Summary Report to GeoTracker.
- E. As specified in Health and Safety Code section 25299.39.2, subdivision (a) (2), corrective action costs incurred after a recommendation of closure shall be limited to \$10,000 per year unless the Board or its delegated representative agrees that corrective action in excess of that amount is necessary to meet closure requirements, or additional corrective actions are necessary pursuant to section 25296.10, subdivisions (a) and (b). Pursuant to section 25299.57, subdivision (l) (1), and except in specified circumstances,

all claims for reimbursement of corrective action costs must be received by the Fund within 365 days of issuance of the closure letter in order for the costs to be considered.

- F. Any Regional Water Board or Local Oversight Program Agency directive or order that directs corrective action or other action inconsistent with case closure for the UST case identified in Section II is rescinded, but only to the extent the Regional Water Board order or Local Oversight Program Agency directive is inconsistent with this Order.

Thomas Howard

Executive Director

9/30/13

Date

State Water Resources Control Board

UST CASE CLOSURE REVIEW SUMMARY REPORT

Agency Information

Agency Name: Alameda County Environmental Health Department (County)	Address: 1131 Harbor Bay Parkway, Alameda, CA 94502
Agency Caseworker: Dilan Roe	Case No.: RO0000456

Case Information

USTCF Claim No.: 5518	Global ID: T0600100908
Site Name: BP Station #11102	Site Address: 100 MacArthur Blvd., Oakland, CA 94610
Responsible Party 1: Conoco Phillips C/O Terry Grayson	Address: 76 Broadway Street, Sacramento, CA 95818
Responsible Party 2: H & Song Son Myong	Address: 100 MacArthur Blvd., Oakland, CA 94610
Responsible Party 3: BP/ARCO C/O Paul Supple	Address: PO Box 1257, San Ramon, CA 94583
Responsible Party 4: ExxonMobil C/O Jennifer Sedlachek	Address: 4096 Piedmont Avenue #194, Oakland, CA 94611
USTCF Expenditures to Date: \$193,619	Number of Years Case Open: 24

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100908

Summary

The Low-Threat Underground Storage Tank (UST) Case Closure Policy (Policy) contains general and media-specific criteria, and cases that meet those criteria are appropriate for closure pursuant to the Policy. This case meets all of the required criteria of the Policy. A summary evaluation of compliance with the Policy is shown in **Attachment 1: Compliance with State Water Board Policies and State Law**. The Conceptual Site Model upon which the evaluation of the case has been made is described in **Attachment 2: Summary of Basic Case Information (Conceptual Site Model)**. Highlights of the case follow:

An unauthorized leak was reported in October 1988 following the removal of an underground storage tank (UST). Approximately 15 yards of waste oil impacted soil were removed during the UST replacement activity in 1988. Five USTs were removed between 1988 and 1990. There are currently four USTs at this active commercial fueling facility. An unknown amount of contaminated soil was excavated in 1994 during the replacement of USTs. A total of 4 wells have been installed and monitored regularly since 1989. According to groundwater data, water quality objectives (WQOs) have been achieved for all constituents except for methyl tert-butyl ether (MTBE), and tert-butyl alcohol (TBA).

The petroleum release is limited to the shallow soil and groundwater. According to data available in GeoTracker, there are no California Department of Public Health regulated supply wells or surface water bodies within 1,000 feet of the defined plume boundary. No other water supply wells have been identified within 1,000 feet of the defined plume boundary in files reviewed.

Water is provided to water users near the Site by the East Bay Municipal Utilities District. The affected groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected groundwater will be used as a source of drinking water in the foreseeable future. Other designated beneficial uses of impacted groundwater are not threatened and it is highly unlikely that they will be considering these factors in the context of the site setting. Remaining petroleum hydrocarbon constituents are limited, stable and concentrations are decreasing. Corrective actions have been implemented and additional corrective actions are not necessary. Any remaining petroleum hydrocarbon constituents do not pose a significant risk to human health, safety or the environment.

Rationale for Closure under the Policy

- **General Criteria:** The case meets all eight Policy general criteria.
- **Groundwater Specific Criteria:** The case meets Policy Criterion 1 by Class 5. The Site would have met the Class 4 criteria except for one well having MTBE concentrations in excess of 1,000 µg/L. The regulatory agency determines that, based on an analysis of site specific conditions under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and WQO will be achieved within a reasonable time frame. The groundwater plume is less than 1,000 feet in length, and no municipal wells have been identified near the Site.
- **Vapor Intrusion to Indoor Air:** The case meets the Policy Exclusion for Active Station. Soil vapor evaluation is not required because Site is an active commercial petroleum fueling facility. In addition, the residual dissolved petroleum hydrocarbon plume is under a freeway exchange.
- **Direct Contact and Outdoor Air Exposure:** The case meets Policy Criterion 3a. Maximum concentrations in soil are less than those in Policy Table 1 for Commercial/Industrial land use. The concentration limits for a Utility Worker are not exceeded. There are no soil sample results in the case record for naphthalene. However, the relative concentration of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline. Taken from Potter and Simmons (1998), gasoline mixtures contain approximately 2 percent benzene and 0.25 percent naphthalene. Therefore, benzene can be directly substituted for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Policy Table 1. Therefore, the estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

Objections to Closure and Responses

The County objects to case closure in its response to the Fund's Third 5-Year Review Recommendation (February 13, 2013) because:

- Based on the recurring concentration spikes in the historic groundwater data, the County is concerned that the source area(s) have not been adequately characterized and the cause(s), date(s), and type of release(s) not adequately addressed and has requested additional investigation.

RESPONSE: The extent of contamination is defined by the current monitoring well network. The Case meets the Policy criteria.

July 2013

- MTBE plume is undefined.
RESPONSE: The concentrations of MTBE in well MW-4 demonstrate a downward trend and water quality objectives will be reached within an acceptable time frame. In addition, it is impossible to determine if the source for the MTBE reported in MW-4 is from the subject site or from runoff from the extensive Interstate Highway exchange that surrounds the well.
- Preferential pathways are undefined.
RESPONSE: The extent of the contamination is adequately defined and meets the Policy criteria. In addition, multiple sources of MTBE may be present due to numerous highway lanes and subsequent run off.

Determination

Based on the review performed in accordance with Health & Safety Code Section 25299.39.2 subdivision (a), the Fund Manager has determined that closure of the case is appropriate.

Recommendation for Closure

Based on available information, residual petroleum hydrocarbons at the Site do not pose a significant risk to human health, safety, or the environment, and the case meets the requirements of the Policy. Accordingly, the Fund Manager recommends that the case be closed. The State Water Board is conducting public notification as required by the Policy. Alameda County has the regulatory responsibility to supervise the abandonment of monitoring wells.

Lisa Babcock

Lisa Babcock, P.G. 3939, C.E.G. 1235

7/16/13

Date

Prepared by: Abdul Karim Yusufzai

ATTACHMENT 1: COMPLIANCE WITH STATE WATER BOARD POLICIES AND STATE LAW

The case complies with the State Water Resources Control Board policies and state law. Section 25296.10 of the Health and Safety Code requires that sites be cleaned up to protect human health, safety, and the environment. Based on available information, any residual petroleum constituents at the site do not pose significant risk to human health, safety, or the environment.

The case complies with the requirements of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.¹

<p>Is corrective action consistent with Chapter 6.7 of the Health and Safety Code and implementing regulations? The corrective action provisions contained in Chapter 6.7 of the Health and Safety Code and the implementing regulations govern the entire corrective action process at leaking UST sites. If it is determined, at any stage in the corrective action process, that UST site closure is appropriate, further compliance with corrective action requirements is not necessary. Corrective action at this site has been consistent with Chapter 6.7 of the Health and Safety Code and implementing regulations and, since this case meets applicable case-closure requirements, further corrective action is not necessary, unless the activity is necessary for case closure.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Have waste discharge requirements or any other orders issued pursuant to Division 7 of the Water Code been issued at this case?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>If so, was the corrective action performed consistent with any order?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>
<p><u>General Criteria</u> General criteria that must be satisfied by all candidate sites:</p> <p>Is the unauthorized release located within the service area of a public water system?</p> <p>Does the unauthorized release consist only of petroleum?</p> <p>Has the unauthorized (“primary”) release from the UST system been stopped?</p> <p>Has free product been removed to the maximum extent practicable?</p> <p>Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>

¹ Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.
http://www.waterboards.ca.gov/board/decisions/adopted_orders/resolutions/2012/rs2012_0016atta.pdf

<p>Has secondary source been removed to the extent practicable?</p> <p>Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15?</p> <p>Nuisance as defined by Water Code section 13050 does not exist at the site?</p> <p>Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p><u>Media-Specific Criteria</u> Candidate sites must satisfy all three of these media-specific criteria:</p> <p>1. Groundwater: To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:</p> <p>Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?</p> <p>Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites?</p> <p>If YES, check applicable class: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5</p> <p>For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>
<p>2. Petroleum Vapor Intrusion to Indoor Air: The site is considered low-threat for vapor intrusion to indoor air if site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies.</p> <p>Is the site an active commercial petroleum fueling facility? Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk.</p> <p>a. Do site-specific conditions at the release site satisfy all of the applicable characteristics and criteria of scenarios 1 through 3 or all of the applicable characteristics and criteria of scenario 4? If YES, check applicable scenarios: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>

<p>b. Has a site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?</p> <p>c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>
<p>3. Direct Contact and Outdoor Air Exposure: The site is considered low-threat for direct contact and outdoor air exposure if site-specific conditions satisfy one of the three classes of sites (a through c).</p> <p>a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?</p> <p>b. Are maximum concentrations of petroleum constituents in soil less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health?</p> <p>c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>

ATTACHMENT 2: SUMMARY OF BASIC CASE INFORMATION (Conceptual Site Model)

Site Location/History

- This Site is located 100 MacArthur Boulevard in Oakland and is an active commercial petroleum fueling facility.
- The Site is bounded by residences to the north and east, Oakland Avenue to the southeast, and MacArthur Boulevard and Interstate 580 with associated on and off ramps (13 lanes of traffic in the downgradient groundwater flow direction) to the south and west. The area surrounding the Site is mixed commercial and residential.
- Site map showing the location of the current and former USTs, monitoring wells and groundwater level contours is provided at the end of this closure review summary (Arcadis, 2012).
- Nature of Contaminants of Concern: Petroleum hydrocarbons only.
- Source: UST system.
- Date reported: October 1988.
- Status of Release: USTs replaced.
- Free Product: None reported.

Tank Information

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed/Active	Date
1	280/550	Waste Oil	Removed	September 1988
2	6,000	Gasoline	Removed	1990
3	10,000	Gasoline	Removed	1990
4	12,000	Gasoline	Removed	1990
5	1,000	Waste Oil	Removed	1990
6	6,000	Gasoline	Active	--
7	10,000	Gasoline	Active	--
8	12,000	Gasoline	Active	--
9	1,000	Waste Oil	Active	--

Receptors

- GW Basin: Santa Clara Valley – East Bay Plain.
- Beneficial Uses: The Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) Basin plan lists: Municipal and Domestic Supply.
- Land Use Designation: Aerial photograph available on GeoTracker show the land use is mixed commercial and residential upgradient of the Site and an extensive freeway exchange downgradient.
- Public Water System: East Bay Municipal Utilities District.
- Distance to Nearest Supply Well: According to data available in GeoTracker, there are no public supply wells regulated by the California Department of Public Health within 1,000 feet of the defined plume. No other water supply wells were identified within 1,000 feet of the defined plume in the files reviewed.
- Distance to Nearest Surface Water: There is no identified surface water within 1,000 feet of the defined plume.

Geology/Hydrogeology

- Stratigraphy: The Site is underlain by interbedded and intermixed gravel, sand, silt and clay.
- Maximum Sample Depth: 36 feet below ground surface (bgs) in borehole SB-4A.
- Minimum Groundwater Depth: 8.57 feet bgs at monitoring well MW-1.
- Maximum Groundwater Depth: 15.50 feet bgs at monitoring well MW-3.
- Current Average Depth to Groundwater: Approximately 12 feet bgs.
- Saturated Zones(s) Studied: Approximately 9 - 32 feet bgs.
- Groundwater Flow Direction: Predominantly west to southwest with an average gradient of 0.04 feet/foot (August 2012).

Monitoring Well Information

Well Designation	Date Installed	Screen Interval (feet bgs)	Depth to Water (feet bgs) (08/15/2012)
MW-1	Oct 1989	12-32	12.88
MW-2	Oct 1989	12-32	12.93
MW-3	Oct 1989	12-32	11.68
MW-4	Nov 2010	4-20	12.51

Remediation Summary

- Free Product: None reported in GeoTracker.
- Soil Excavation: Approximately 15 yards of waste oil impacted soil were removed during the UST replacement activity in 1988. An unknown amount of petroleum contaminated soil was excavated in 1994 during the replacement of USTs.
- In-Situ Soil/Groundwater Remediation: None reported.

Most Recent Concentrations of Petroleum Constituents in Soil

Constituent	Maximum 0-5 feet bgs [mg/kg and (date)]	Maximum 5-10 feet bgs [mg/kg and (date)]
Benzene	0.006 (10/25/89)	0.008 (10/25/89)
Ethylbenzene	3.0 (07/14/05)	2.4 (07/14/05)
Naphthalene	NA	NA
PAHs	NA	NA

NA: Not Analyzed, Not Applicable or Data Not Available
 mg/kg: milligrams per kilogram, parts per million
 <: Not detected at or above stated reporting limit
 PAHs: Polycyclic aromatic hydrocarbons

Most Recent Concentrations of Petroleum Constituents in Groundwater

Sample	Sample Date	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)
MW-1	08/15/2012	<50	<0.5	<0.5	<0.5	<1	10	8.6
MW-2	08/15/2012	<250	<2.5	<2.5	<2.5	<5	450	4,400
MW-3	08/15/2012	<1,000	<10	<10	<10	<20	3,500	420
MW-4	08/15/2012	<50	<0.5	<0.5	<0.5	<1	44	6.2
WQOs	-	-- ^a	1	150	700	1,750	5 ^b	1,200 ^c

NA: Not Analyzed, Not Applicable or Data Not Available

µg/L: micrograms per liter, parts per billion

<: Not detected at or above stated reporting limit

TPHg: Total petroleum hydrocarbons as gasoline

MTBE: Methyl tert-butyl ether

TBA: Tert-butyl alcohol

WQOs: Water Quality Objectives, Regional Water Board Basin Plan

^a: The Regional Water Board does not have numeric values for water quality objectives for TPHg

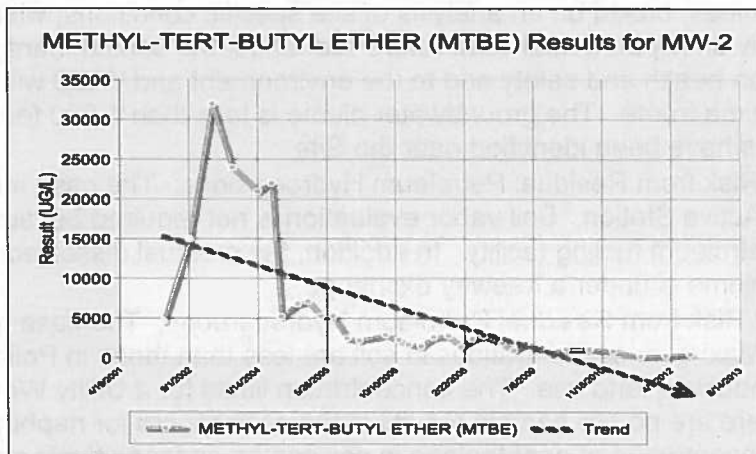
^b: Secondary maximum contaminant level (MCL)

^c: California Department of Public Health, Response Level

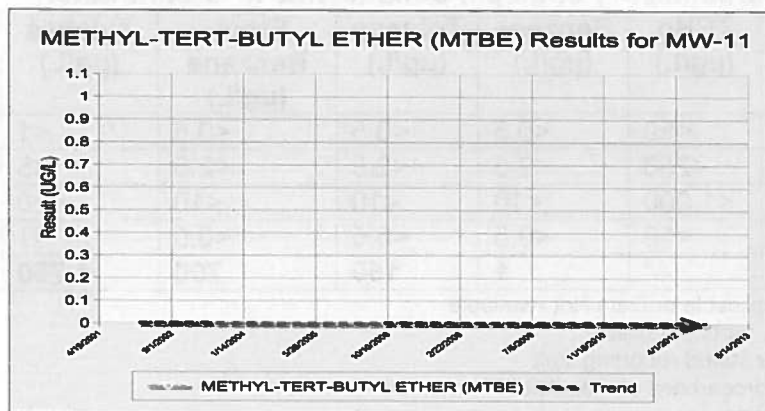
Groundwater Trends

There are 23 years of regular groundwater monitoring data for this case. MTBE trends are shown below: Source Area (MW-2), Near Downgradient (MW-4), and Far Downgradient (MW-11 [Unocal #1871]). Unocal well MW-11 is located approximately 400 feet southwest of MW-2.

Source Area Well



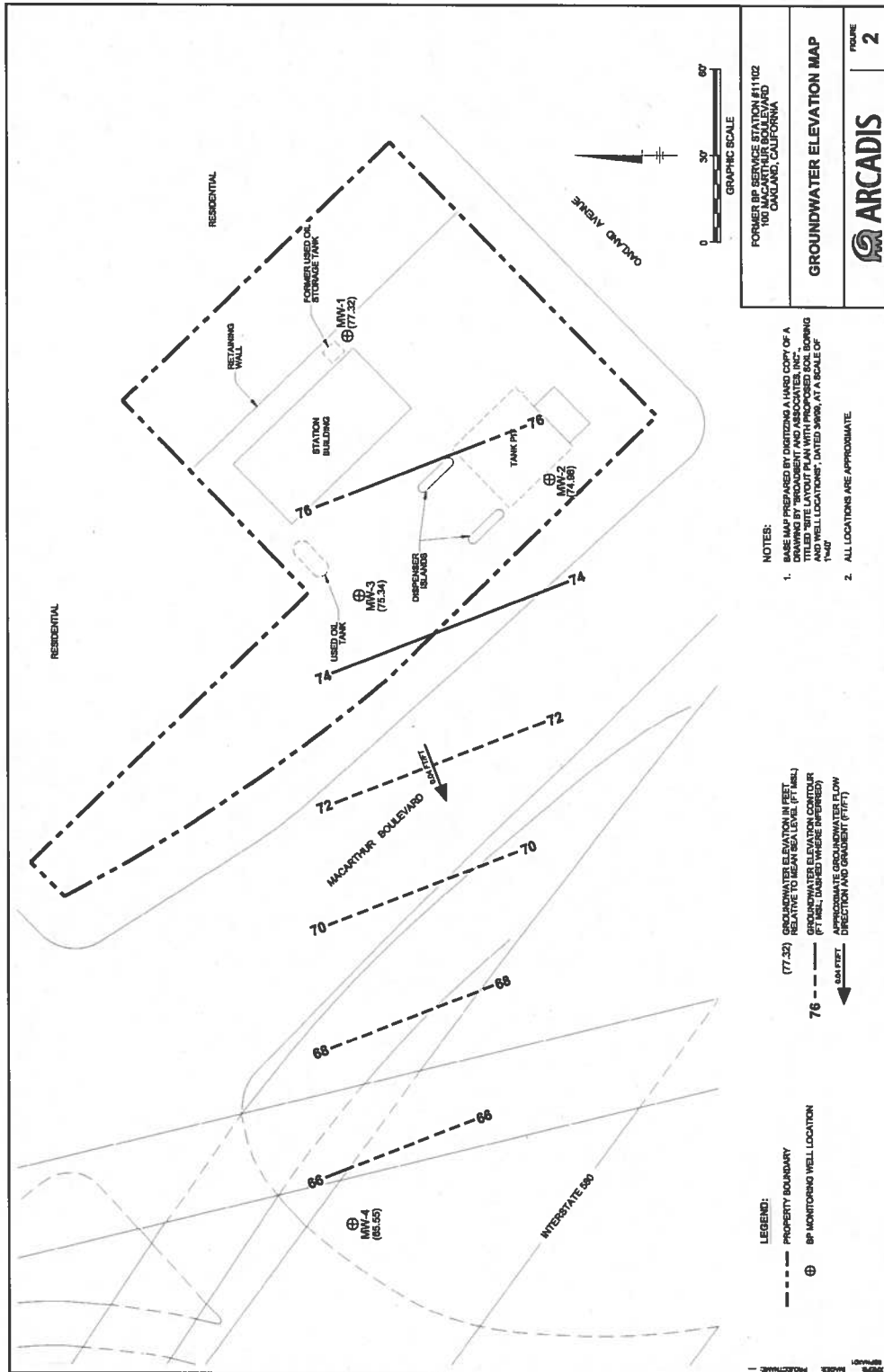
Downgradient Well (Adjacent UST Site Well, not shown on figure)



2

Evaluation of Current Risk

- Estimate of Hydrocarbon Mass in Soil: None reported.
- Soil/Groundwater tested for methyl tert-butyl ether (MTBE): Yes, see table above.
- Oxygen Concentrations in Soil Vapor: None reported.
- Plume Length: <1,000 feet long.
- Plume Stable or Decreasing: Yes.
- Contaminated Zone(s) Used for Drinking Water: No.
- Groundwater Risk from Residual Petroleum Hydrocarbons: Groundwater Specific Criteria: The case meets Policy Criterion 1 by Class 5. The Site would have met the Class 4 criteria except for one well having MTBE concentrations in excess of 1,000 µg/L. The regulatory agency determines, based on an analysis of site specific conditions, which under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and WQO will be achieved within a reasonable time frame. The groundwater plume is less than 1,000 feet in length; no municipal wells have been identified near the Site.
- Indoor Vapor Risk from Residual Petroleum Hydrocarbons: The case meets the Policy Exclusion for Active Station. Soil vapor evaluation is not required because Site is an active commercial petroleum fueling facility. In addition, the residual dissolved petroleum hydrocarbon plume is under a freeway exchange.
- Direct Contact Risk from Residual Petroleum Hydrocarbons: The case meets Policy Criterion 3a. Maximum concentrations in soil are less than those in Policy Table 1 for Commercial/Industrial land use. The concentration limits for a Utility Worker are not exceeded. There are no soil sample results in the case record for naphthalene. However, the relative concentration of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline. Taken from Potter and Simmons (1998), gasoline mixtures contain approximately 2 percent benzene and 0.25 percent naphthalene. Therefore, benzene can be directly substituted for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Policy Table 1. Therefore, the estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.



FORMER BP SERVICE STATION #11102
 100 MACARTHUR BOULEVARD
 OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION MAP

ARCADIS

FIGURE | 2

- NOTES:
1. BASE MAP PREPARED BY DOTTING & LARSON COPY OF A DRAWING BY TROBANDT AND ASSOCIATES, INC., TITLED "SITE LAYOUT PLAN WITH PROPOSED SOIL BORING AND WELL LOCATIONS", DATED 9/8/99, AT A SCALE OF 1/4"=1'-0".
 2. ALL LOCATIONS ARE APPROXIMATE.

(77.23) GROUNDWATER ELEVATION IN FEET, RELATIVE TO MEAN SEA LEVEL (FT MSL)

76 - - - - - GROUNDWATER ELEVATION CONTOUR (FT MSL, DASHED WHERE INFERRED)

76 - - - - - APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT (F/F/T)

76 - - - - - SANITARY

LEGEND:

- - - - - PROPERTY BOUNDARY

⊕ BP MONITORING WELL LOCATION

DATE: 07/15/13
 DRAWN BY: J. HARRIS
 CHECKED BY: J. HARRIS
 PROJECT: BP STATION #11102
 SHEET: 2 OF 2



Attachment B

Permits

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 12/09/2013 By jamesy

Permit Numbers: W2013-0989 to W2013-0992
Permits Valid from 01/20/2014 to 02/28/2014

Application Id: 1382987885345
Site Location: 100 MacArthur Blvd.
Project Start Date: 12/16/2013
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org
Extension Start Date: 01/20/2014
Extension Count: 1

City of Project Site:Oakland

Completion Date:12/31/2013
Extension End Date: 02/28/2014
Extended By: priest

Applicant: ARCADIS - Adam Kinnard
2000 Powell Street, 7th Floor, Emeryville, CA 94608
Property Owner: Song Po Son
100 MacArthur Blvd., Oakland, CA 94610
Client: ** same as Property Owner **
Contact: Adam Kinnard

Phone: 510-596-9526

Phone: 510-653-6519

Phone: 510-596-9526
Cell: --

	Total Due:	\$1588.00
Receipt Number: WR2013-0470	Total Amount Paid:	\$1588.00
Payer Name : ARCADIS	Paid By: CHECK	PAID IN FULL

Works Requesting Permits:

Well Destruction-Monitoring - 4 Wells
Driller: Gregg Drilling - Lic #: 485165 - Method: press

Work Total: \$1588.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2013-0989	12/09/2013	03/16/2014	MW1	10.00 in.	4.00 in.	2.00 ft	32.00 ft	1S/4W25C	No Records	No Records
W2013-0990	12/09/2013	03/16/2014	MW2	10.00 in.	4.00 in.	2.00 ft	32.00 ft	1S/4W25C	No Records	No Records
W2013-0991	12/09/2013	03/16/2014	MW3	10.00 in.	4.00 in.	2.00 ft	32.00 ft	1S/4W25C	No Records	No Records
W2013-0992	12/09/2013	03/16/2014	MW4	8.25 in.	2.00 in.	2.00 ft	20.00 ft	1S/4W25C	W2010-0184	e0127012

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755

Alameda County Public Works Agency - Water Resources Well Permit

(Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.
5. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.
6. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
7. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
8. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
-

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT
 TR-0120

Permit No. 0413-6SV 2187	
Dist/Co/Rte/PM 04-ALA-580- 44.33	
Date December 12, 2013	
Fee Paid \$492.00	Deposit \$
Performance Bond Amount (1)	Payment Bond Amount (2)
Bond Company	
Bond Number (1)	Bond Number (2)

In compliance with (Check one):

- Your application of November 22, 2013
- Utility Notice No. _____ of _____
- Agreement No. _____ of _____
- R/W Contract No. _____ of _____

TO: **ARCADIS-US**
 2000 Powell Street, 7th Floor
 Oakland, CA 94612

Attn: Hollis Philips
 Phone: (415) 596-9526

, PERMITTEE

And subject to the following, **PERMISSION IS HEREBY GRANTED** to:

Abandon groundwater monitoring well (MW-4) near the 76 service station, 100 MacArthur Blvd., as required by the Regional Water Quality Control Board. The MW-4 is located off on local street in the foliage area at the Harrison Street UC, on State Highway 04-ALA-580, Post Mile 44.33, in the City of Oakland.

A minimum of one week prior to start of work under this permit, notice shall be given to, and approval of construction details, operations, public safety, and traffic control shall be obtained from State representative Sunny Mantravadi, Telephone number (510)715-957, between 7:30 AM and 4:00 PM. Monday- Friday.

All permitted work requires the permittee to apply for and obtain a work authorization number prior to start of work. See the attached "Encroachment Permit Project Work Scheduling Procedures" and the attached "Permit Project Work Scheduling Request Form". Additional time beyond the minimum seven days advanced notice required in the above paragraph may be required for obtaining the traffic control approval.

The following attachments are also included as part of this permit (Check applicable):

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | General Provisions |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | Utility Maintenance Provisions |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Storm water Special Provisions |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | A Cal-OSHA permit required prior to beginning work:
_____ |

In addition to fee, the permittee will be billed actual costs for:

- | | | |
|---|--|------------|
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | Review |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Inspection |
| <input type="checkbox"/> Yes | ----- | Field Work |

(If any Caltrans effort expended)

Yes No The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before December 31, 2014.


This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized. No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

DC

CC: Permit: S. Mantravadi
 Maint: B. Kimball
 DTM :S. Torchia
 Env.: C. Wilson
 TMC: J. Richardson, D4TMC/D04/Caltrans/CAGov
 File:

APPROVED:

BIJAN SARTIPI, District Director

BY: 
DAVID SALLADAY, District Permit Engineer

ADDITIONAL GENERAL SPECIAL PROVISIONS:

All personnel shall wear appropriate personal protective equipment, including hard hats and bright colored vest, shirts, or jackets with retro-reflective material while on State Right-of-Way.

Caltrans is not subscribed to Underground Services Alert (USA). Caltrans may have existing electrical, signal and communication facilities within 9" from the surface. Permittee shall identify all existing underground facilities prior to perform trenching or boring and also repair/replace any damaged Caltrans facility due to their operation.

The Permittee shall make appropriate arrangement with a licensed vendor and California Highway Patrol (CHP) or a local Traffic Control Officers for traffic control and management, at Permittee's expense, in accordance with the approved traffic control plan.

The Permittee or the Contractor shall notify the State representative and submit an Encroachment Permit Work Scheduling Request Form 7days prior to the scheduled work activities.

Before any work is begun which will interrupt the normal flow of public traffic, approval shall be obtained from State representative.

No vehicle or equipment shall be stored overnight within the right-of-way; it shall be removed immediately at the completion of the project.

Permittee shall be responsible for the collection and removal of trash or garbage generated by these construction activities.

All debris shall be removed from the right of way and the area left in a safe and presentable condition at the end of each presentable day.

Any damage to existing State's facilities shall be repaired or replaced in kind by the Permittee at Permittee's expense.

Suitable barricades, signs and lights, as approved by State representative, to warn and protect traffic effectively shall enclose the site of the work.

Permittee shall provide safe pedestrian and bicycle passage around construction area.

All traffic signs to comply with 2012 MUTCD Section, 6F.01 through Section 6F.04. The signs shall have orange background. The Link: http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/ca_mutcd2012.htm

No lane or ramp closure permitted on State Right-of-Way. All Traffic control on surface streets shall be approved by appropriate City authorities.

No ingress or egress from the freeway to the worksite is permitted.

Shoulder may be closed at anytime except between 6:00 AM to 9: 00 AM and 3:00 PM to 7:00 PM, Monday – Friday. No, shoulder and lane closure permitted any other time. Exclude holidays.

When approved, the traffic control performed under this permit shall be in accordance the appropriate State Standard 2010, Plans RSP T10. For shoulder closer see RSP T10. Where required by plan, the use of flashing arrow board is MANDATORY. Use of flagman is required.

Shoulder and /or parking (if applicable) may be closed while work is actively in progress.

Permittee and the Contractor shall check with the City of Oakland within their jurisdiction for conflict in closure schedule, and cooperate and coordinate with all other construction work activities in that vicinity.

If an accident or other incident (related to or not related to the permitted activity) occurs within, or close to the permitted activity, the Permittee shall immediately stop work and remove traffic controls from the highway unless public health, welfare and safety is endangered by unfinished work. Only traffic control to protect open excavations may remain in place. After free traffic flow is restored, work in accordance with the conditions of the permit may be returned.

Any damage to existing facilities, landscaping or irrigation within the State Right-of-Way shall be replaced in kind by the Permittee at Permittee's expense. Any damaged concrete sidewalk shall be replaced from score-line to score-line and shall be ADA Compliant.

Residue from saw cutting, coring and grinding operation shall be picked up by vacuum device. Residue shall not be allowed to flow across the pavement and shall not be left on the surface of the pavement.

Vacuumed slurry residue shall be disposed in accordance with, "Solid Waste Management" and "Storm Water Special Provisions for Minimal or No Impact."

Permittee shall remove and dispose of all drilled spoils outside of State Right-of-Way. Permittee shall provide records of all the sites of disposal facilities to State representative.

Where there are potential Caltrans electrical facilities (lighting, signal, metering, etc) exist on the project site and not shown on the plans, the Permittee shall be responsible to resolve any conflicts and changes during construction. The Permittee shall incur any additional cost when there are changes to the original plans.

Permitter reserves the right to impose any additional requirements or conditions, including considerations, for the use of its right of way, if such requirements or conditions are allowed by future legislation, administrative determination, and/or court decisions.

Any change in the existing drainage pattern, whether occasioned by increase or diversion, and the cost of any damage, repair or restoration of the State's Highway Right-of-Way shall be the responsibility of the Permittee.

The Permittee is responsible for any contaminated material and/or groundwater, which are generated due to excavation under this permit. The Permittee shall also adhere to all current rules and regulations which may apply for the containment, disposal and/or clean-up of any contaminated material and/or groundwater which is excavated.

Any future relocation of this facility for highway maintenance or construction shall be at the Permittee's expense. Section 703 of the Streets and Highway Code shall not apply.

In addition to the above conditions, Permittee understand and acknowledges that the conditions, limitations, restrictions and reservation for access to state-owned highway right of way for telecommunications and information technologies, including consideration and means of access, are subject to current and ongoing Department and/or legislative review, and this permit may be revoked, made subject to different conditions, limitations, restrictions and reservations, or converted to license, lease or other form of agreement, upon reasonable notice.

A copy of this permit and local, complete with all attachments, shall be kept by Permittee/Contractor working under this permit and must be shown to the State representatives, or Law Enforcement Officer, on demand.

Permittee understands and agrees that it will comply with the obligations of Titles II and III of the Americans with Disabilities Act of 1990 in the conduct of the event, and further agrees to indemnify and save harmless the State of California, all officers and employees thereof, including but not limited to the Director of Transportation, from any claims or liability arising out of or by virtue of said act.

The Contractor for the Permittee shall apply for an Encroachment Permit for the work authorized therein, and the application shall be accompanied by a check in the amount of ~~\$328.00~~ to cover the permit fee. Permittee shall be billed for any additional inspection cost at the current Caltrans standard hourly rate of ~~\$82.00~~ per hour.

Permittee shall be responsible for full compliance with the Caltrans Storm Water Program and the Caltrans NPDES permit requirements. Please see the Storm Water Special Provisions attached to this Permit.

The Permittee shall provide signed and sealed construction detail plans for the State representative for review and approval a week before construction.

This permit does not authorize tree trimming or tree removal.

Permittee shall be responsible to maintain the proposed improvements within State Right-of-Way.

Permittee shall be responsible for any liability issue due to the proposed improvements within State Right-of-Way.

California Endangered Species Act must be adhered to the law, regulations and policies in the provisions, <http://www.dfg.ca.gov/habcon/cesa/>.

Migratory Bird Treaty Act must be adhered to the law, regulations and policies in the provisions, <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html> ; no work shall be allowed during bird nesting and the nesting area must not be disturbed and shall be protected.

The Permittee is responsible for maintaining the improvement facilities within this encroachment permit at no cost to the State.

Changes to the Plans, Specifications, and Permit Provisions are not allowed without prior approval from the State representative.

Immediately following completion of the work permitted herein, the Permittee shall fill out and mail the Notice of Completion attached to this permit.

Changes to the Plans, Specifications, and Permit Provisions are not allowed without prior approval from the State representative.

Immediately following completion of the work permitted herein, the Permittee shall fill out and mail the Notice of Completion attached to this permit.



Attachment C

Well Completion Reports

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED