

February 15, 2005

Mr. Robert Schultz  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-8577

**RE: Electronic Report Submission**

Dear Mr. Schultz:

The purpose of this letter is to inform you that on behalf of the Atlantic Richfield Company (RM), a BP affiliated company, URS Corporation (URS) will issue all future quarterly monitoring reports (QMR) electronically to the State Water Resources Control Board's GEOTRACKER website (<http://www.geotracker.swrcb.ca.gov/>). You may access your report directly from this website. If you would prefer to have a PDF copy e-mailed to you or if you would like to continue receiving a paper copy, please contact Rick Murray at (510) 874-1755.

If you have any questions regarding this submission, please call me at (510) 874-3125.

Sincerely,

**URS CORPORATION**



Rachel Lindvall  
QMR Coordinator

## Electronic Submittal Information

[Main Menu](#) | 
 [View/Add Facilities](#) | 
 [Upload EDD](#) | 
 [Check EDD](#)

### UPLOADING A GEO\_REPORT FILE

**YOUR DOCUMENT UPLOAD WAS SUCCESSFUL!**

<b><u>Facility Name:</u></b>	BP
<b><u>Global ID:</u></b>	T0600100213
<b><u>Title:</u></b>	1Q 2005 QMR Site 11132
<b><u>Document Type:</u></b>	Monitoring Report - Quarterly
<b><u>Submittal Type:</u></b>	GEO_REPORT
<b><u>Submittal Date/Time:</u></b>	4/14/2005 12:57:27 PM
<b><u>Confirmation Number:</u></b>	7835111320

**Click [here](#) to view the document.**

[Back to Main Menu](#)

Logged in as URSCORP-OAKLAND  
(CONTRACTOR)

CONTACT SITE [ADMINISTRATOR](#).



Atlantic Richfield Company  
(a BP affiliated company)

Atlantic Richfield Company  
4 Centerpointe Drive, Room 172  
La Palma, CA 90623-1066  
Phone: (714) 670-5303

Alameda County  
AUG 25 2004  
Environmental Health

August 13, 2004

Mr. Robert Shultz  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

RE: BP Heritage Sites Environmental Project Responsibility

Dear Mr. Shultz:

The purpose of this letter is to inform you of the recent reorganization of Atlantic Richfield Company's (RM) environmental staff that manages retail facility environmental efforts in Northern California. Former BP retail sites 11102, 11104, 11107, 11109, 11117, 11120, 11126, 11132, 11133, 11266 and 11270 will now be managed by myself. Atlantic Richfield Company heritage sites will continue to be managed by Paul Supple. Please direct all correspondence for retail environmental issues regarding these sites to me at the following address:

Kyle Christie  
Atlantic Richfield Company  
4 Centerpointe Drive, Room 172  
La Palma, CA 90623-1066

I look forward to working closely with you on environmental issues affecting these projects and would appreciate meeting with you to discuss any of these projects at your convenience. Please feel free to call me at (714) 670-5303 with any questions. I can also be reached via email at [chriska@bp.com](mailto:chriska@bp.com).

Sincerely,

Kyle Christie  
Environmental Business Manager  
Remediation Management

cc: Liz Sewell, ConocoPhilips

## Hwang, Don, Env. Health

---

**From:** Hwang, Don, Env. Health  
**Sent:** Friday, May 28, 2004 8:22 AM  
**To:** 'Leonard\_Niles@URSCorp.com'  
**Subject:** RE: Site #11132 workplan modification

Leonard, The proposed changes are acceptable. Don

-----Original Message-----

**From:** Leonard\_Niles@URSCorp.com [mailto:Leonard\_Niles@URSCorp.com]  
**Sent:** Wednesday, May 05, 2004 10:26 AM  
**To:** DHwang@co.alameda.ca.us  
**Cc:** supplpv@bp.com; Joseph\_Gonzales@URSCorp.com;  
Robert\_Horwath@URSCorp.com  
**Subject:** Site #11132 workplan modification

Don,

URS advanced six onsite geoprobe borings at the former BP site#11132 at 3201 35th Avenue, Oakland on April 19-20, 2004. Due to difficulties encountered in drilling due to dense soils, URS proposes using a cone penetration testing (CPT) rig for the proposed offsite borings as described in the attached letter (hard copy in mail). Please let me know if the proposed change in scope of work is acceptable.

Leonard P. Niles, R.G./C.H.G  
Senior Geologist  
URS Corporation  
1333 Broadway, Suite 800  
Oakland, CA 94612  
Direct: 510.874.1720  
Fax: 510.874.3268

(See attached file: BP 11132 ACHCS SWI Modification  
Letter\_5-4-04\_DRAFT.doc)



Alameda County

January 23, 2004

JAN 25 2004

Mr. Don Hwang  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Ste. 250  
Alameda, CA 94502-6577

Environmental Health

**RE: Fuel Leak Case No. RO0000014, BP Station #11132, 3201 35<sup>th</sup> Ave., Oakland, CA,  
Request for Extension of Soil and Groundwater Investigation Report Due Date.**

Dear Mr. Hwang,

On behalf of Atlantic Richfield Company (ARCO, an affiliate of BP), URS has prepared this letter in response to comments made by the Alameda County Health Care Services (ACHCS) in a letter dated January 13, 2004. The comments regard the "Soil and Groundwater Investigation Workplan Addendum," submitted by URS on May 28, 2003, and a further letter responding to ACHCS technical comments submitted by URS on December 13, 2003.

We received your letter of January 13, 2004 approving field work for the subsurface investigation at the former BP service station #11132 at 3201 35th Avenue, Oakland. You set a due date of March 13, 2004 for the subsurface investigation report. We would like to apply for an extension, as we feel this is not an achievable deadline. Since at least half the proposed borings are located in the nearby streets, we need to apply for City of Oakland encroachment and street excavation permits, which is a time consuming process with an uncertain turnaround time for permit approval before we can commence drilling activities. This is an extensive and complex investigation with a large number of soil borings (about 24 total) and analytical samples which will require a large amount of post-drilling data review & report preparation time. As a further disruptive factor, we are in the middle of relocating our company offices, which will extend through next week.

I am requesting that the report deadline be extended to 60 days after completion of subsurface investigation field activities, subject to permit approval by City of Oakland for encroachment permits and Alameda County Environmental Health for boring permits. We anticipate performing the field activities before March 13, 2004, subject to timely permit approval. Please feel free to contact me at (510.874.1720) with any questions or comments you may have.

Sincerely,

**URS Corporation**

Leonard P. Niles, R.G. 5774/C.H.G 357  
Project Manager

Cc: Mr. Paul Supple: BP/ARCO, Environmental Resources Management, PO Box 6549, Moraga, CA 94549  
Ms. Liz Sewell, ConocoPhillips, 75 Broadway, Sacramento, CA 95818

URS Corporation  
500 12th Street, Suite 200  
Oakland, CA 94607-4014  
Tel: 510 893.3600  
Fax: 510.874.3268

## Hwang, Don, Env. Health

---

To: Leonard\_Niles@URSCorp.com  
Subject: RE: Subsurface Investigation, BP #11132

ok

-----Original Message-----

From: Leonard\_Niles@URSCorp.com [mailto:Leonard\_Niles@URSCorp.com]  
Sent: Friday, January 23, 2004 1:37 PM  
To: DHwang@co.alameda.ca.us  
Cc: supplpv@bp.com; Robert\_Horwath@URSCorp.com  
Subject: Subsurface Investigation, BP #11132

Don,

We received your letter of January 13, 2004 approving field work for the subsurface investigation at the former BP service station #11132 at 3201 35th Avenue, Oakland. You set a due date of March 13, 2004 for the subsurface investigation report. We would like to apply for an extension, as we feel this is not an achievable deadline. Since at least half the proposed borings are located in the nearby streets, we need to apply for City of Oakland encroachment and street excavation permits, which is a time consuming process with an uncertain turnaround time for permit approval before we can commence drilling activities. This is an extensive and complex investigation with a large number of soil borings (about 24 total) and analytical samples which will require a large amount of post-drilling data review & report preparation time. As a further disruptive factor, we are in the middle of relocating our company offices, which will extend through next week.

I am requesting that the report deadline be extended to 60 days after completion of subsurface investigation field activities, subject to permit approval by City of Oakland for encroachment permits and Alameda County Environmental Health for boring permits. We anticipate performing the field activities before March 13, 2004, subject to timely permit approval. We will follow up this e-mail with a mailed request. Please call me if you have any questions.

Sincerely,

Leonard P. Niles, R.G./C.H.G  
Senior Geologist  
URS Corporation  
500 12th Street, Suite 200  
Oakland, California 94607  
Direct: 510.874.1720  
Fax: 510.874.3268

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

January 13, 2004

Mr. Paul Supple  
BP Oil  
PO Box 6549  
Moraga, CA 94570

Dear Mr. Supple:

Subject: Fuel Leak Case No. RO0000014, BP Station #11132, 3201 35<sup>th</sup> Ave., Oakland, CA

Alameda County Environmental Health (ACEH) staff has reviewed "... Response to Technical Comments from ACHCS on 'Soil and Groundwater Investigation Workplan Amendment,' May 28, 2003" dated December 12, 2003 by URS Corporation (URS). ACEH approves of "Soil and Groundwater Investigation Workplan Amendment, dated May 28, 2003" with the "... Response ..." dated December 12, 2003. We request that you perform the work proposed and send us the technical reports requested below.

TECHINCAL REPORT REQUEST

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

March 13, 2004 - Soil and Groundwater Investigation

These reports are being requested pursuant to the Regional Water Quality Control Board's (Regional Board) authority under Section 13267 of the California Water Code. If you have any questions, please call me at (510) 567-6746.

Sincerely,

Don Hwang  
Hazardous Materials Specialist  
Local Oversight Program

C: Leonard Niles, URS Corporation, 500-12<sup>th</sup> St., Suite 200, Oakland, CA 94607-4014  
Donna Drogos  
✓ 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

October 13, 2003

Mr. Paul Supple  
BP Oil  
PO Box 6549  
Moraga, CA 94570

Dear Mr. Supple:

Subject: Fuel Leak Case No. RO0000014, BP Station #11132, 3201 35<sup>th</sup> Ave., Oakland, CA

Alameda County Environmental Health (ACEH) staff has reviewed "Soil and Groundwater Investigation Workplan Amendment" dated May 28, 2003 by URS Corporation (URS). We generally concur with the work proposed. We request that you address the following technical comments and send us the technical reports requested below.

**TECHNICAL COMMENTS**

1. Corrective Action Plan – The California Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB)'s "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (Interim Final - July 2003)" is acceptable for risk evaluation. The Oakland Risk-Based Corrective Action (RBCA) approach to evaluate risk may also be used for Benzene, Toluene, Ethyl Benzene, Xylene (BTEX).
2. Contaminant Source Characterization – Proposed borings UB-7 and UB-8 are located downgradient of the underground tanks. We would like them moved as close to the tanks as possible but in native soil. There may have been releases since the tanks were replaced in 1986. Please locate borings UB-7 and UB-8 closer to the tanks.
3. Preferential Pathway Survey – In addition to the map(s) to be submitted, please use cross-sections showing the location and depth of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s). Evaluate the probability of the contaminant plumes encountering preferential pathways and conduits that could spread the contamination, particularly in the vertical direction to deeper water aquifers. Please submit.
4. Well Survey – Locate wells within a quarter mile radius of the site. Show the location of the wells on a map and list well construction details for each well. Indicate which of the wells may be potential receptors.



5. Missing reports

- a. 1986 - removal of underground tanks
- b. September 4, 1990 – installation of MW4, MW5, MW6, MW7, RW1
- c. October 11, 1990 – sampling of D1, D2, D3, PT-1, 2, 3, 4
- d. December 16, 1994 - sampling of THP1-S-4-4.5
- e. March 1991 - SB 8, 9, 10

Please submit.

TECHINCAL REPORT REQUEST

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

December 13, 2003 – Site plan showing borings UB-7 and UB-8 closer to the tanks.

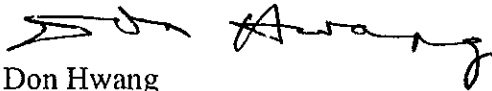
December 13, 2003 – Preferential Pathway Survey

December 13, 2003 – Well Survey

December 13, 2003 – Missing reports

These reports are being requested pursuant to the Regional Water Quality Control Board's (Regional Board) authority under Section 13267 of the California Water Code. If you have any questions, please call me at (510) 567-6746.

Sincerely,



Don Hwang  
Hazardous Materials Specialist  
Local Oversight Program

C: Leonard Niles, URS Corporation, 500-12<sup>th</sup> St., Suite 200, Oakland, CA 94607-4014  
Donna Drogos  
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

March 19, 2003

Mr. Scott Hooton  
BP Oil  
295 SW 41<sup>st</sup> Street, Bldg 13, Suite N  
Renton, CA 98055-4931

Mr. Dave DeWitt  
Tosco Marketing Co  
2000 Crow Canyon Pl, Ste 400  
San Ramon, CA 95118-3686

Dear Messrs. Hooton and DeWitt:

Subject: Fuel Leak Case No. RO0000014, BP Station #11132, 3201 35<sup>th</sup> Ave., Oakland, CA

Our office is in receipt of the March 7, 2003 letter from URS Corporation (URS) regarding their submission of their workplan dated October 28, 2002, their disagreement with a conversation from our office, which requested additional investigation, and their intent to implement the workplan by March 20, 2003. URS and Mr. Scott Hooton of BP Oil were notified by our office on November 1, 2002 that the workplan was not approved and an addendum to the workplan was required. We request that you address the following technical comments and send us the technical reports requested below.

#### TECHNICAL COMMENTS

1. Contaminant Plume Definition - We do not agree that the proposal to install groundwater monitoring wells will determine the extent of contamination in the soil and groundwater. Instead, we want a proposal for borings for that purpose. Submit your proposal in the Workplan Addendum requested below.
2. Groundwater Contaminant Plume Monitoring - We do not agree with the proposal to install groundwater monitoring wells at this time. Instead, we want a proposal for borings to better determine the location for future wells. Submit a proposal for borings to locate wells in the Workplan Addendum requested below.
3. Corrective Action Plan - We do not agree with the proposal to solely use the Oakland Risk-Based Corrective Action (RBCA) approach to evaluate risk. The Oakland RBCA does not include Total Petroleum Hydrocarbons (TPH). The ceiling value of 5,000 ug/l found in the State Regional Water Quality Control Board (SRWQCB)'s "Application of Risk Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater" dated December 2001, may be used. Also, we judge the RBCA process to be inappropriate for Methyl Tertiary-Butyl Ether (MTBE) but instead use a resource protection cleanup goal of not greater than 5 ppb. Characterization and definition of your contaminant plumes should be completed before performing risk evaluation. Submit a proposal to evaluate risk from TPH, and MTBE using the resource protection cleanup goal of 5 ppb in the Workplan Addendum requested below.

Messrs. Hooton and DeWitt

March 20, 2003

Page 2 of 2

4. Contaminant Source Characterization - The workplan proposes to incorporate soil data into the conceptual site model (CSM). The data need not be limited to soil only. Modify the workplan in the Workplan Addendum requested below.

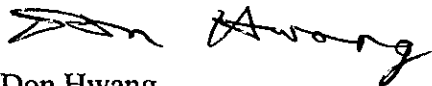
#### TECHINCAL REPORT REQUEST

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

May 19, 2003 - Workplan Addendum

These reports are being requested pursuant to the Regional Water Quality Control Board's (Regional Board) authority under Section 13267 of the California Water Code. If you have any questions, please call me at (510) 567-6746.

Sincerely,



Don Hwang  
Hazardous Materials Specialist  
Local Oversight Program

C: Leonard Niles, URS Corporation, 500-12<sup>th</sup> St., Suite 200, Oakland, CA 94607-4014  
Donna Drogos  
✓ File



2000 Crow Canyon Place  
Suite 400  
San Ramon, CA 94583

Phone: (925) 277-2306  
Fax: (925) 277-2361

Environmental Department

September 30, 2002

Mr. Scott Hooton  
BP Oil Company  
Midwest Environmental Services  
295 SW 41<sup>st</sup> Street  
Bldg 13, Suite N  
Renton, WA 98055

Alameda County  
OCT 03 2002  
Environmental Health

Rc: Former BP Oil Site No. 11132  
3201 35<sup>th</sup> Avenue  
Oakland, CA

Dear Mr. Hooton:

Tosco recently received a letter from Ms. Eva Chu requesting a Soil and Water Investigation (SWI) and Corrective Action Plan (CAP) for this site. The letter was addressed to both BP Oil and Tosco Marketing Company.

Tosco has evaluated of the environmental history of the site and believe the responsibility for the clean up rests with BP Oil. Per the terms of our Environmental Agreement, Tosco expects BP oil to submit the SWI and CAP for the site.

Please call me at 925-277-2384 with comments or concerns.

Sincerely,

David B. DeWitt  
Environmental Project Manager

Cc: Mike Bryan, Costa Mesa  
Bob Staab, Tempe  
Eva Chu, Alameda County HCS

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

RO0000014

September 9, 2002

Mr. Scott Hooton  
BP Oil  
295 SW 41<sup>st</sup> Street, Bldg 13, Suite N  
Renton, CA 98055-4931

Mr. Dave DeWitt  
Tosco Marketing Co  
2000 Crow Canyon Pl, Ste 400  
San Ramon, CA 95118-3686

**RE: SWI and CAP for BP Station #11132 at 3201 35<sup>th</sup> Ave, Oakland, CA**

Dear Messrs. Hooton and DeWitt:

I have completed review of the fuel leak case file for the above referenced site. Up to 1,700,000 ppb TPHg, 19,000 ppb benzene and 56,000 ppb MTBE has been detected in groundwater. Separate phase hydrocarbon has been noted in wells RW-1 and MW-1 since July 1990. This letter presents a request for full three-dimensional definition, investigation, and a proposal for cleanup of soil and groundwater contamination from the unauthorized release at the site. You are hereby required to complete a Soil and Water investigation and prepare a Corrective Action Plan (CAP) for the subject site in accordance with California Code of Regulations, Title 23, Division 3, Chapter 16, Article 11, "Corrective Action Requirements; State Water Resources Control Board Resolution 92-49, "Policies and Procedure for Investigation, Cleanup and Abatement of Discharges Under Water Code Section 13304"; and with the Regional Water Quality Control Board Water Quality Control Plan for the basin.

The following technical comments address investigation and cleanup performance objectives that shall be considered as part of the required Soil and Water Investigation and CAP. A workplan for the Soil and Water Investigation is **due by October 28, 2002** that addresses each of the following technical comments.

## TECHNICAL COMMENTS

### 1. Conduit Study

The purpose of the conduit study is to locate potential migration pathways and potential conduits and determine the probability of the plume encountering preferential pathways and conduits that could spread the contamination. Please provide a map showing the location and depth of all utility lines and trenches (including sewers and storm drains), wells (water supply, irrigation, monitoring, abandoned and improperly-destroyed), and creeks (former and present) or underground water channels.

Using the results of the conduit study and data from previous investigations at the site, you are to develop the initial three-dimensional conceptual model of site conditions. You are to use this initial conceptual model to determine the appropriate configuration for samplings points in the SWI phase of work at this site. Discuss your analysis and interpretation of the results of the conduit study and explain your rationale for the configuration of sampling points in the SWI work plan requested below.

## **2. Contaminant Plume Definition**

The purpose of contaminant plume definition is to determine the three-dimensional extent of contamination in soil and groundwater. The plume extent at the site is undefined. In July 2002, up to 86,000 ppb TPHg, 7,310 ppb benzene and 2,520 ppb MTBE was detected in groundwater. Free phase product is currently present at the site.

MTBE is more mobile in soil and groundwater than the typical petroleum hydrocarbon compounds, is highly soluble in groundwater, and is not readily biodegradable. MTBE plumes can be long, narrow, and erratic. Because of these characteristics, conventional investigation techniques and monitoring well networks currently used at fuel leak sites are generally insufficient to adequately characterize MTBE contamination. Therefore, it is recommended that you propose an investigation that will include depth discrete soil and groundwater sampling. Soil and groundwater samples should be collected at 5 feet intervals, areas of obvious contamination, the soil/groundwater interface, and at each unit of lithology change. It is recommended that your investigation incorporate expedited site assessment techniques and borings installed along transects to define and quantify the full three-dimensional extent of MTBE. The borings should be continuously cored. Detailed cross sections, fence diagrams, structural contours, isopachs, and rose diagrams for groundwater should be subsequently incorporated in the SWI completion report. Discuss your proposal for performing this work in the SWI work plan requested below.

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

## **3. Contaminant Source Characterization**

The purpose of contaminant source characterization is to determine the nature and extent of free product (liquid phase), petroleum saturate soils (residual phase), hydrocarbons dissolved in groundwater (aqueous phase), and high concentrations of soil vapor (vapor phase) that will continue to increase the concentration and mass of the dissolved phase contaminant plume.

It is requested that source area characterization be initiated at the start of the Soil and Water Investigation phase of work. Source area characterization and contaminant mass estimations are needed to determine the necessity and aggressiveness of interim source cleanup and/or dissolved phase mass removal. Report the results of your work in the Soil and Water Investigation Report requested below.

## **4. Groundwater Contaminant Plume Monitoring**

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

Once the extent of the plume is defined, we request that you install permanent monitoring wells to monitor the three-dimensional movement of the plume. Multi-depth discrete wells may be required. We request that you use the detailed cross section, structural contours, isopachs, and rose diagrams for groundwater gradient developed during Task 2 above, to determine the appropriate locations and designs for monitoring

wells that are necessary to appropriately monitor the movement of the plume. Please submit your proposal for the installation of monitoring wells in the Soil and Water Investigation Report and report on the installation of the wells in the Soil and Water Investigation Completion Report.

Quarterly groundwater monitoring should continue at the site. Analysis for ether oxygenates, ethanol, EDB and 1,2-DCA (using EPA Method 8260) should be included for the next two quarters, at a minimum.

## **5. Corrective Action Plan**

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

A CAP for the final cleanup of contamination in soil and groundwater caused by an unauthorized release at the site will be requested upon completion of the Soil and Water Investigation in accordance with the schedule specified below. The CAP shall address at least two technically and economically feasible methods to restore and protect beneficial uses of water and to meet the cleanup objectives for each contaminant established in the CAP. The CAP must propose verification monitoring to confirm completion of corrective actions and evaluate CAP implementation effectiveness.

### **TECHINCAL REPORT REQUEST**

Please submit technical reports according to the following schedule:

**October 28, 2002** – Work plan for Soil and Water Investigation

**110 Days from Work Plan Approval** – Soil and Water Investigation (Results of Expedited Site Assessment) Report

**180 Days from Submittal of Soil and Water Investigation Report** – Soil and Water Investigation Completion Report

**90 Days after Submittal of Soil and Water Investigation Completion Report** - Corrective Action Plan

**October 30, 2002** – Quarterly Report for the Third Quarter 2002

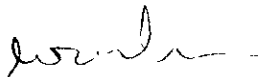
**January 30, 2003** – Quarterly Report for the Fourth Quarter 2002

**April 30, 2003** – Quarterly Report for the First Quarter 2003

These reports are being requested pursuant to the Regional Board's authority under Section 13267 of the California Water Code. **Each report shall include conclusions and recommendations for the next phases of work required at the site.** It is requested that all required work be performed in a prompt and timely manner. I have proposed a schedule for the submittal of the Soil and Water Investigation Report and the CAP. Revisions to the proposed schedule shall be requested in writing with appropriate justification for anticipated delays.

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

Sincerely,

A handwritten signature in cursive script, appearing to read 'eva chu', with a horizontal line extending to the right.

eva chu  
Hazardous Materials Specialist



## Chu, Eva, Env. Health

---

**From:** Chu, Eva, Env. Health  
**Sent:** Friday, July 19, 2002 3:35 PM  
**To:** Hooton Scott (E-mail)  
**Subject:** BP 11132 at 3201 35th Avenue, Oakland, CA

Hi Scott,

I'm the new case worker for the above referenced site. I reviewed the case file and find that the only subsurface investigation reports (quarterly monitoring reports and sewer discharge reports, excepted) we have on file are:

- Alton Geoscienc's August 21, 1991 *Phase III - Supplemental Site Investigation Study*, and
- Hydro-Environmental Technologies' March 20, 1992 *Interim Remedial Action Plan*

Missing are underground storage tank removal report (or laboratory analytical results), well installation reports for wells MW-1 through MW-7 and recovery well RW-1, and reports documenting temporary well and or other soil borings advanced at the site. Please provide copies of reports summarizing subsurface investigations conducted at the site. Thanks.

*eva chu*  
Hazardous Materials Specialist  
1131 Harbor Bay Parkway  
(510) 567-6762  
(510) 337-9335 (fax)

LOP - CHANGE RECORD REQUEST FORM

printed:  
04/27/2000

Mark Out What Needs Changing and Hand to LOP Data Entry  
(Name/Address changes go to Annual Programs Data Entry)

Insp:

AGENCY # : 10000      SOURCE OF FUNDS: F      SUBSTANCE: 8006619  
 StID : 3878      LOC:  
 SITE NAME: BP Oil Facility #11132      DATE REPORTED : 04/15/1986  
 ADDRESS : 3201 35th Ave      DATE CONFIRMED: 04/15/1986  
 CITY/ZIP : Oakland      94619      MULTIPLE RPs : Y

SITE STATUS

-----  
 CASE TYPE: S CONTRACT STATUS: 4      PRIOR CODE:2B3      EMERGENCY RESP:  
 RP SEARCH: S      DATE COMPLETED: 11/04/1992  
 PRELIMINARY ASMNT:      DATE UNDERWAY:      DATE COMPLETED:  
 REM INVESTIGATION:      DATE UNDERWAY:      DATE COMPLETED:  
 REMEDIAL ACTION:      DATE UNDERWAY:      DATE COMPLETED:  
 POST REMED ACT MON:      DATE UNDERWAY:      DATE COMPLETED:

ENFORCEMENT ACTION TYPE: 6      DATE ENFORCEMENT ACTION TAKEN: 07/01/1994  
 LUFT FIELD MANUAL CONSID: HSCAWG  
 CASE CLOSED:      DATE CASE CLOSED:  
 DATE EXCAVATION STARTED : 03/01/1987      REMEDIAL ACTIONS TAKEN: ED FP

RESPONSIBLE PARTY INFORMATION

-----  
 RP#1-CONTACT NAME: Scott Hooton  
 COMPANY NAME: BP Oil Co.  
 ADDRESS: 295 SW - 41st St., Ste N  
 CITY/STATE: Renton WA 98055

RP#2-CONTACT NAME: Chester Bennett  
 COMPANY NAME: Tosco Corporation  
 ADDRESS: 2130 Professional Dr #100  
 CITY/STATE: Roseville CA 95661-3738

INSPECTOR VERIFICATION:

NAME _____	SIGNATURE _____	DATE _____
------------	-----------------	------------

DATA ENTRY INPUT:

Name/Address Changes Only			Case Progress Changes	
ANNPMS _____	LOP _____	DATE _____	LOP _____	DATE _____



BP OIL

OCT 19 PM 4

ENVIRONMENTAL PROTECTION

98 OCT 19 PM 4:43

BP Oil Company  
Environmental Remediation Management  
295 SW 41st Street  
Renton, Washington 98055-4931  
(425) 251-0667  
Fax No: (425) 251-0736

October 10, 1998

SH  
LDP  
3878

Mr. Raymond Maxwell  
East Bay Municipal Utility District  
Source Control Division  
P.O. Box 24055  
Oakland, California, 94623

Subject: Sewer Discharge Permit - Semi-Annual Report  
BP Oil Branded Service Station No. 11132  
3201 35th Street  
Oakland, California  
Wastewater Discharge Permit No. 502-62901

Dear Mr. Maxwell,

This is to inform you that the remediation system at the branded BP Oil Service Station No.11132, 3201 35th Street, Oakland California has been shut down during the reporting period of April 1,1998 to September 30,1998.

Please call if you have any questions regarding this submittal.

Sincerely,

Scott T. Hooton  
Environmental Remediation Management

STH:sb msworddis11132

cc: Peter Beaver, Alisto Engineering

~~Mr. Barney Chan, Alameda County Health Care Services Agency~~

Site File





BP OIL

2878

BP Oil Company  
Environmental Remediation Management  
295 SW 41st Street  
Renton, Washington 98055-4931  
(425) 251-0667  
Fax No. (425) 251-0736

October 10, 1997

Mr. Raymond Maxwell  
East Bay Municipal Utility District  
Source Control Division  
P.O. Box 24055  
Oakland, California, 94623

ENVIRONMENTAL  
PROTECTION  
97 OCT 16 AM 9:45

Subject: Sewer Discharge Permit - Semi-Annual Report  
BP Oil Branded Service Station No. 11132  
3201 35th Street  
Oakland, California  
Wastewater Discharge Permit No. 502-62901

Dear Mr. Maxwell,

This is to inform you that the remediation system at the branded BP Oil Service Station No.11132, 3201 35th Street, Oakland California has been shut down during the reporting period of April 1 to September 30,1997.

Please call if you have any questions regarding this submittal.

Respectfully,

Scott T. Hooton  
Environmental Resources Management  
Corrective Action Manager

STH:sb msword\dis11132

cc: Peter Beaver, Alisto Engineering

Mr. Barney Chan, Alameda County Health Care Services Agency

Site File



**BP OIL**

BP Oil Company  
Environmental Resources Management  
Building 13, Suite N  
295 SW 41st Street  
Renton, Washington 98055-4931  
(206) 251-0667  
Fax No: (206) 251-0736

October 10, 1996

*Susan's*

*3878*

Mr. Raymond Maxwell  
East Bay Municipal Utility District  
Source Control Division  
P.o. Box 24055  
Oakland, California, 94623

Subject: Sewer Discharge Permit - Semi-Annual Report  
BP Oil Branded Service Station No. 11132  
3201 35th Street  
Oakland, California  
Wastewater Discharge Permit No. 502-62901

Dear Mr. Gonzalez,

This is to inform you that the remediation system at the branded BP Oil Service Station No. 11132, 3201 35th Street, Oakland California has been shut down during the reporting period of April 1, 1996 to September 30, 1996.

Please call if you have any questions regarding this submittal.

Respectfully,

*for Susan Bacon*  
Scott T. Hooton  
Environmental Resources Management  
Corrective Action Manager

STH:sb msword/dis11266

cc: Peter Beaver, Alisto Engineering

~~Mr. Barney Chan, Alameda County Health Care Services Agency~~

Site File



**BP OIL**

BP Oil Company  
Environmental Resources Management  
Building 13, Suite N  
295 SW 41st Street  
Renton, Washington 98055-4931  
(206) 251-0667  
Fax No: (206) 251-0736

April 10, 1996

Mr. Florencio Gonzalez  
East Bay Municipal Utility District  
Source Control Division  
P.o. Box 24055  
Oakland, California, 94623

Subject: Sewer Discharge Permit - Semi-Annual Report  
BP Oil Branded Service Station No. 11132  
3201 35th Street  
Oakland, California  
Wastewater Discharge Permit No. 502-62901

Dear Mr. Gonzalez,

This is to inform you that the remediation system at the branded BP Oil Service Station No.11132, 3201 35th Street, Oakland California has been shut down during the reporting period of October 1, 1995 to March 31,1996.

Please call if you have any questions regarding this submittal.

Respectfully,

Scott T. Hooton  
Environmental Resources Management  
Corrective Action Manager

STH:sb msword\dis11266

cc: Peter Beaver, Alisto Engineering  
*SH?*  
Mr. Barney Chan, Alameda County Health Care Services Agency

Site File

ENVIRONMENTAL  
PROTECTION

96 APR 15 PH 2:43

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, DIRECTOR

February 27, 1996

DEPARTMENT OF ENVIRONMENTAL HEALTH  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577  
(510)567-6700

✓ Ted Trenholme  
Alameda County Water District  
P.O. Box 5110  
Fremont, CA 94537

Clifford Young  
City of Union City  
Hazardous Materials Department  
34009 Alvarado-Niles Road  
Union City, CA 94587

Julie Belomy  
City of Fremont  
Hazardous Materials Unit  
39100 Liberty Street  
Fremont, CA 94538

Hugh Murphy  
Hayward Fire Department  
25151 Clawiter Road  
Hayward, CA 94546-2731

Sukla De  
Newark Fire Department  
37101 Newark Boulevard  
Newark, CA 94560

RE: BP EXPLORATION AND OIL COMPANY SITE REVIEW MEETINGS -  
FOLLOW-UP

Dear Ms. Belomy and De, and Messrs. Trenholme, Young and Murphy:

This letter is sent as a reminder to present a brief report regarding the compliance of BP Oil sites with respect to environmental clean-up or assessment issues. Please be reminded that my November 27, 1995 correspondence asked that each agency involved in this process identify any shortcomings and report them both to me and BP Oil, allowing BP the opportunity to remedy any lingering issues.

I would appreciate your prompt attention to this issue so that I may report your findings to the District Attorney's Office and complete the role of this office in assisting your efforts in achieving BP's compliance.

Should there be any questions, please feel free to contact me at 510/567-6783.

Sincerely,

  
Scott O. Seery, CHMM  
Senior Hazardous Materials Specialist



LIA UST lead staff  
RE: BP Oil status update request  
February 27, 1996  
Page 2 of 2

cc: Jun Makishima, Acting Director  
Tom Peacock, ACDEH LOP  
Gil Jensen, Alameda County District Attorney's Office  
ACDEH LOP staff *SH*

2836121

ALAMEDA COUNTY HAZARDOUS MATERIALS DIVISION

02/14/96

UNDERGROUND STORAGE TANK CLEANUP SITE

AGENCY#: 10000	SOURCE OF FUNDS: F-FEDERAL	INSPECTOR: SH
StID: 3878	SUBSTANCE: 8006619 -Gasoline	
SITE NAME: BP Oil Facility #11132		DATE REPORTED : 04/15/86
ADDRESS : 3201 35th Ave		DATE CONFIRMED: 04/15/86
CITY/ZIP : Oakland, CA 94619		MULTIPLE RP's : Y

CASE TYPE: S CONTRACT STATUS: 4 PRIOR:2B3 EMERGENCY RESPONSE:

RP SEARCH : S	DATE END: 11/04/92
PRELIM ASSESSMENT :	DATE END:
REMEDIAL INVESTIG :	DATE END:
REMEDIAL ACTION :	DATE END:
POST REMED MONITOR:	DATE END:

TYPE ENFORCEMENT ACTION TAKEN: 6 DATE OF ENFORC. ACTION: 07/01/94

UNDERGROUND STORAGE TANK CLEANUP SITE - SCREEN #2

LUFT FIELD MANUAL CONSIDERATION: HSCAWG CASE CLOSED: on:

DT EXC START: 03/01/87 REMEDIAL ACTIONS TAKEN: ED FP

RP #1: CONTACT: Scott Hooton	RP COST:
RP COMPANY NAME: B P Oil Co.	Ph:
ADDRESS: 295 SW - 41st St., Ste N	
CITY/STATE: Renton WA 98055	

ΔMaMENT:

SITE ID#: 3878

ADDITIONAL RP'S

RP #2	
CONTACT NAME: Chester Bennett	
COMPANY NAME: Tosco Corporation	RP Ph: 916-774-2942
ADDRESS: 2130 Professional Dr #100	
CITY/ST/ZIP: Roseville CA 95661-3738	

## MEMORANDUM

DATE: October 20, 1994

TO: LOP staff

FROM: Scott Seery <sup>LOS</sup>

SUBJ: BP Oil Company site review meetings

---

Attached please find a copy of the revised BP Oil bimonthly site review meeting schedule. Such meetings are a stipulation of the settlement between BP and the Alameda County District Attorney's Office. Please note that an additional site (highlighted) will be discussed at the November 16, 1994 meeting.

Please mark your calendars for the date upon which your sites will be discussed. Please be prepared to attend each meeting and be present an in-depth discussion regarding case status, such as:

- o whether BP is adhering to the respective "timeline-to-closure"
- o direction in which the project should proceed
- o appropriateness of target analytes and monitoring/sampling schedules (i.e., should they occur more or less frequently?)
- o whether BP is adhering to agency requests for specific tasks
- o what's needed to close case, etc., etc.

Please note that each meeting is scheduled to begin at 9:00 AM.

ALAMEDA COUNTY BP OIL SITES  
SITE REVIEW MEETING SCHEDULE

September 16, 1994

#11125	35550 Fremont Blvd.	Fremont
11115	46840 Warm Springs Blvd.	Fremont
11100	4190 Mowry Avenue	Fremont
11114	4997 Stevenson Blvd.	Fremont

November 16, 1994

#11268	37630 Blacow Road	Fremont
11134	210 West Jackson	Hayward
11270	3255 McCurtney	Alameda
11132	3201 35th Ave.	Oakland
11104	1716 Webster Street	Alameda

January 18, 1995

#11119	31300 Alvarado-Niles Blvd.	Union City
11113	35425 Newark Blvd.	Newark
11130	28590 Mission Blvd.	Hayward
11126	1700 Powell Street	Emeryville

March 15, 1995

#11131	21494 Foothill Blvd.	Hayward
11109	4280 Foothill Blvd.	Oakland
11116	7197 Village Pkwy.	Dublin

May 17, 1995

#11269	2492 Whipple Road	Hayward
02487	700 West "A" Street	Hayward
11105	3519 Castro Valley Blvd.	Castro Valley
11107	18501 Hesperian Blvd.	Hayward

July 19, 1995

#11112	1109 West Tennyson Blvd.	Hayward
11267	1974 West Tennyson Blvd.	Hayward
11133	2220 98th Avenue	Oakland
11266	1541 Park Avenue	Alameda

September 20, 1995

#11102	100 MacArthur Blvd.	Oakland
11117	7210 Bancroft Avenue	Oakland
11120	6400 Dublin Blvd.	Dublin
11127	5425 Martin Luther King	Oakland

November 15, 1995

#11101	3191 Alvarado Blvd.	Union City
11122	3101 98th Avenue	Oakland
11124	3315 High Street	Oakland
11106	15199 Washington Blvd.	San Leandro
02486	2504 Castro Valley Blvd.	Castro Valley

ALAMEDA COUNTY BP OIL SITES  
SITE REVIEW MEETING SCHEDULE

September 21, 1994

#11125	35550 Fremont Blvd.	Fremont
11115	46840 Warm Springs Blvd.	Fremont
11100	4190 Mowry Avenue	Fremont
11114	48997 Stevenson Blvd.	Fremont

November 16, 1994

#11268	37630 Blacow Road	Fremont
11134	210 West Jackson	Hayward
11270	3255 McCurtney	Alameda
11132	3201 35th Ave.	Oakland

January 18, 1995

#11119	31300 Alvarado-Niles Blvd.	Fremont
11113	35425 Newark Blvd.	Newark
11130	28590 Mission Blvd.	Fremont
11126	1700 Powell Street	Emeryville

March 15, 1995

#11131	21494 Foothill Blvd.	Hayward
11104	1716 Webster Street	Alameda
11109	4280 Foothill Blvd.	Oakland
11116	7197 Village Pkwy.	Dublin

May 17, 1995

#11269	2492 Whipple Road	Hayward
02487	700 West "A" Street	Hayward
11105	3519 Castro Valley Blvd.	Castro Valley
11107	18501 Hesperian Blvd.	Hayward

July 19, 1995

#11112	1109 West Tennyson Blvd.	Hayward
11267	1974 West Tennyson Blvd.	Hayward
11133	2220 98th Avenue	Oakland
11266	1541 Park Avenue	Alameda

BP Oil Site List  
Page 2 of 2

September 20, 1995

#11102	100 MacArthur Blvd.	Oakland
11117	7210 Bancroft Avenue	Oakland
11120	6400 Dublin Blvd.	Dublin
11127	5425 Martin Luther King	Oakland

November 15, 1995

#11101	3191 Alvarado Blvd.	Union City
11122	3101 98th Avenue	Oakland
11124	3315 High Street	Oakland
11106	15199 Hesperian Blvd.	San Leandro
02486	2504 Castro Valley Blvd.	Castro Valley

MEMORANDUM

SH

DATE: August 22, 1994

TO: LOP staff

FROM: Scott Seery *SS*

SUBJ: BP Oil Company site review meetings

---

Attached please find a copy of the BP Oil bimonthly site review meeting schedule. You will likely recall that such meetings are a stipulation of the recent settlement between BP and the Alameda County District Attorney's Office.

Please mark your calendars for the date upon which your sites will be discussed. You must attend each meeting and be prepared to present an in-depth discussion regarding case status, such as: whether BP is adhering to the respective "timeline-to-closure," direction in which the project should proceed, appropriateness of target analytes and monitoring/sampling schedules (i.e., should they occur more or less frequently?), whether BP is adhering to agency requests for specific tasks, what's needed to close case, etc., etc.

Please note that each meeting is scheduled to begin at 9:00 AM. I will assume at this time that cases will be presented in the order in which each appear on the attached schedule, although I'm sure some flexibility would seem appropriate in some cases.

Thanks for your assistance.

c: TP, AL  
Mike O'Connor



TABLE 1 - FLOW DATA FOR GROUNDWATER TREATMENT SYSTEM  
 BP OIL COMPANY SERVICE STATION NO. 11132  
 3201 35TH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-024

DATE	FLOW METER READING (Gallons)	EFFLUENT DISCHARGED (Gallons)	AVERAGE FLOW RATE (GPD)	AVERAGE FLOW RATE (GPM)
01/22/93	48860	48860	---	0.00
02/23/93	48860 (a)	0	---	0.00
07/14/93	50770	1910	---	0.00
07/19/93	0 (b)	---	---	0.00
07/26/93	13700	13700	1957	1.36
08/17/93	37367	23667	1076	0.75
09/28/93	64180	26813	638	0.44
10/25/93	86610	22430	831	0.58
11/26/93	95550	8940	279	0.19
12/28/93	116960	21410	669	0.46
01/28/94	117200	240	8	0.01
02/28/94	164070	46870	1512	1.05
03/29/94	208760	44690	1541	1.07
04/29/94	243380	34620	1117	0.78
05/31/94	292140	48760	1524	1.06
09/03/94	410710	118570	1248	0.87
10/05/94	454250	43540	1361	0.94
10/31/94	464410	10160	391	0.27
11/29/94	482970	18560	640	0.44
12/07/94	508770	25800	3225	2.24
01/04/95	508770	0	0	0.00
01/30/95	547720	38950	1498	1.04
02/21/95	570040	22320	1015	0.70
03/30/95	623360	53320	1441	1.00
05/02/95	670240	46880	1421	0.99
05/31/95	705540	35300	1217	0.85
06/28/95	755067	49527	1769	1.23
08/01/95	810087	55020	1618	1.12
08/29/95	846300	36213	1293	0.90
09/28/95	884459	38159	1272	0.88
<b>TOTAL FOR SIX MONTHS</b>		261099	1752	1.22

ABBREVIATIONS:

GPD Gallons per day  
 GPM Gallons per minute  
 --- Not available/applicable

NOTE:

(a) Flow meter not operating.  
 System shut down.  
 (b) Flow meter replaced.

Source: U.S.G.S. Map, East Oakland, California Quadrangle  
7.5 minute series. 1959. Photorevised 1980.

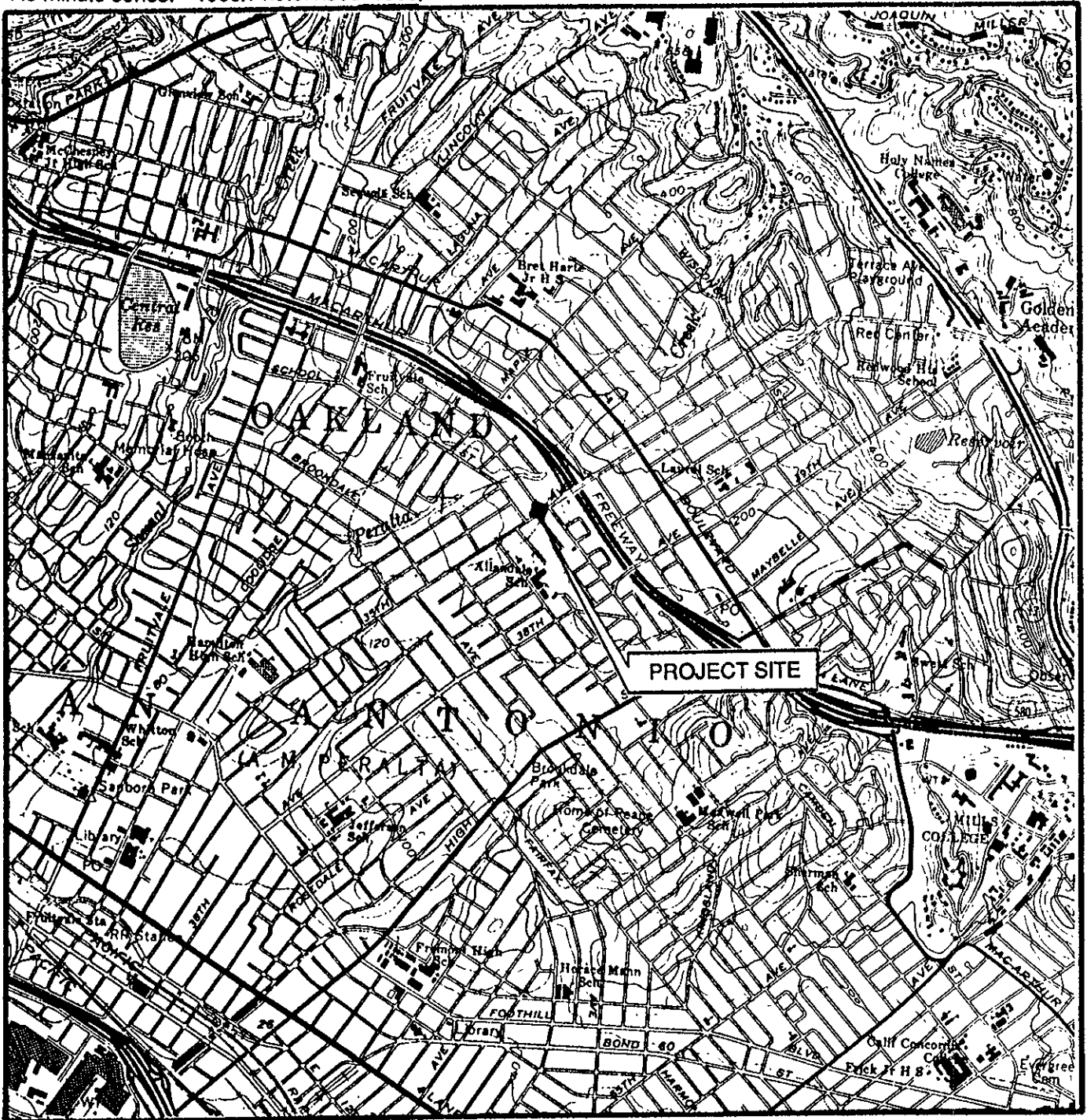


FIGURE 1  
SITE VICINITY MAP

0 1000 2000  
SCALE IN FEET

B P SERVICE STATION NO. 11132  
3201 35TH AVENUE  
OAKLAND, CALIFORNIA

PROJECT NO. 30 - 081



**ALTON GEOSCIENCE**  
1000 Burnett Ave., Ste 140  
Concord, CA 94520

MEMORANDUM

DATE: August 17, 1994  
TO: Scott Seery  
FROM: Susan Hugo  
SUBJ: BP Oil Company Sites Updates

---

---

STID# 1075 - 3315 High Street, Oakland 94619

Category C - need one round of sampling, evaluate the site for closure

STID# 3105 - 5425 Martin Luther King Way, Oakland 94609

Category B - Continue quarterly monitoring of four wells on site; low levels of dissolved contaminants (TPH gas in the range of nd to 220 ppb, nd for benzene, nd for toluene, 0.8 ppb for ethyl benzene, 3.1 ppb for xylene).

STID# 3878 - 3201 35th Avenue, Oakland 94619

Category A - Free product site, one recovery well, total of ten monitoring wells on and off the site, plume delineation needs to be completed.

STID# 4050 - 1700 Powell Street, Emeryville 94608

Category A - Free product site, total of nine monitoring wells on and off the site, free product detected in one well (MW-9) installed 10/12/93, plume delineation needs to be completed.

---



**HYDR  
ENVIRONMENTAL  
TECHNOLOGIES, INC.**

200 Mariner Square Drive, Suite 243  
Alameda, CA 94501  
Tel 510-521-2684  
Fax 510-521-5078

1-800-347-HETI  
Massachusetts  
New York

92 JUN 30 11 12 26

June 29, 1992

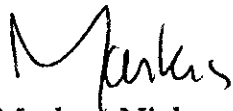
Ms. Susan Hugo  
Alameda County Department of Environmental Health  
Division of Hazardous Materials  
80 Swan Way, Room 358  
Oakland, CA 94621

Dear Susan,

I am glad we had a chance to meet last week. Thank you for pointing out the discrepancy in lab data vs. text in our most recent quarterly report for the referenced site. You also mentioned that you had no record of the 12/91 sampling event that was noted in the cumulative data. I have enclosed a copy of the quarterly report that summarizes this event.

If you have any questions regarding the enclosed, or if I may be of additional assistance, please do not hesitate to call me.

Sincerely,  
HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.



Markus Niebanck  
Western Region Manager

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, Assistant Agency Director

June 2, 1992

Mr. Peter J. DeSantis  
BP Oil Company  
2868 Prospect Park Drive  
Rancho Cordova, CA 95670

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

Subject: BP Service Station No 11132,, 3201 35th. Ave.,  
Oakland, CA

Dear Mr. DeSantis,

This office has received and review the "Interim Remedial Action Plan", dated March 20, 1992, and submitted by Hydro Environmental Technologies(HET), your consultant of record. Thank you for the prompt attention given to this site.

Upon review of the document, this office concurs with the plan as submitted, with the following clarifications:

- 1) Submit all copies of the requisite permits to this office as required by other concerned agencies, especially the City of Oakland Fire Department in regards to the use of above-ground tanks for the purpose of containing possible "Free-product".
- 2) Provide an adequate Quality Control Plan for the pumped water to be discharged into the sanitary sewer system.
- 3) Give this office at least forty-eight (48) hours notice prior to the commencement of any work contemplated at the site discharged.
- 4) Please remit all copies of future correspondence concerning this site to Rich Hiatt, SFBRWQCB.

If you should have any questions concerning this site, please do not hesitate to call this office. The number is (510) 271-4320.

Sincerely,

A handwritten signature in cursive script that reads "Brian P. Oliva".

Brian P. Oliva, REHS  
Hazardous Materials Specialist

cc: Mark Thomson, Alameda Co. District Attorney's Office  
Fred Moss, Hydro Environmental Technologies Inc.  
Rich Hiatt, SFBRWQCB

EL.

STID 3878  
 BP Station  
 3201 35th Avenue Oakland 94619

Remediation Schedule  
 BP Oil Facility #11132  
 Oakland, California

Task Name	1993					1994					1995					1996													
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Supp. Site Investigation(1)	[Task bar]																												
ACHCSA Review(2)																													
RWOCB Review(2)																													
GW System Oper. and Maint.(2)	[Task bar]					[Task bar]					[Task bar]					[Task bar]													
ACHCSA Workplan Review(2)																													
Sparge Well Installation(4)																													
Air Sparging Test(4)																													
Feasibility Study (4)																													
Prepare Remedial Workplan(4)																													
ACHCSA Review(2)																													
RWOCB Review(2)																													
Air Sparge/VES Design(7)																													
Oakland Permit Review(7)																													
PG&E Connection Design(4)																													
Construction Bidding(4)																													
Equipment Procurement(4)																													
BAAQMD Air Permit(7)																													
VES Installation(4)																													
VES Startup(4)																													
VES Operation and Maint.(14)																													
ACWD Review(2)																													
Verification Soil Borings(11)																													
ACWD Review(2)																													
RWOCB Review(2)																													
GW Monitoring and Sampling(12)																													
Verification GW Monitoring(13)																													
ACWD Review(2)																													
RWOCB Review(2)																													
Case Closure Request(14)																													
ACWD Review(2)																													
RWOCB Review(2)																													
VES Shutdown and Decomm.(14)																													
GW System Decommissioning(14)																													
Well Abandonment Work Plan(14)																													
ACWD Review(2)																													
RWOCB Review(2)																													
Well Abandonment(14)																													
Case Closure Report(17)																													

\* Site belongs to Category A  
 Cleanup is not satisfactory. The extent of the plume has not been completely delineated. Pump & treat system started in Nov, 1992. Need to submit status of this system. Only one recovery well being used. Need additional recovery wells to address the free product that migrated off site as detected in the two off site wells. The remediation schedule seems to lack an aggressive approach to remediate the existing free product and dissolved contaminants at the site.







## DESCRIPTION OF TASKS AND ACTIVITIES

BP Oil Company Service Station No. 11132  
3201 35th Avenue  
Oakland, California

Following are the proposed and ongoing tasks and activities for the above site. The schedule of the anticipated scope of work is presented in the attached timeline. The subsequent tasks and schedule may need revisions or further refinement at a later date depending on the results of the preceding tasks and activities.

1. Soil and Groundwater Assessment

Additional investigative work is necessary to assess the nature and extent of hydrocarbons in the soil and groundwater at the site.

2. Agency Review and Approval of Remediation System

The City of Oakland, Alameda County Health Care Services Agency, East Bay Municipal Utilities District, and the California Regional Water Quality Control Board will provide review and approval of the following activities: (1) each phase of assessment; (2) design, permitting, and installation of remedial systems; (3) discharge of treated vapor to the atmosphere; (4) verification of effectiveness of remedial system; and (5) system decommission and case closure.

3. Groundwater Remediation System Operation and Maintenance

The estimated duration of remediation system operation assumes that cleanup levels for groundwater are achieved in 2 years from the date of system startup. This is based on the results of the aquifer pumping test and computer modeling to predict the extent of the capture zone. Actual operation to meet cleanup levels, however, will depend on the accuracy of the assumptions used in the computer modeling, long term performance of the system, and site-specific geologic and hydrogeologic characteristics.

4. Air Sparging Test

After submittal and approval of a work plan, air sparging points will be installed based on the results of previous investigations. An air sparging test will consist of introducing compressed air into the air sparging point, and volatile organic concentrations, dissolved oxygen, and water levels will be measured at the observation points.

5. Feasibility Study and Conceptual Design of Remedial Plan

Based on the results of the site characterization, a detailed feasibility study of alternative technologies for remediation of soil and groundwater will be conducted, as warranted. The detailed evaluation of alternative technologies will consider technical,

economic, environmental, and legal factors. Economic comparison of the alternatives will consider both capital and operating costs as well as the present worth or life cycle cost of each alternative.

On selection of the appropriate remediation alternative, a conceptual design of the selected system will be prepared to include: schematic process layout, an engineering cost estimate, equipment specifications, and an estimated implementation schedule. The format of the report will follow the requirements of the regulatory agencies.

6. Report and Remedial Work Plan

A report presenting the findings, conclusions, and recommendations of the feasibility study will be prepared. The report will include the proposed scope of work for further investigation or implementation of a remedial or corrective action plan, as well as analytical results, sampling documentation, boring logs, field notes, and sampling protocol.

7. Remediation System Design and Permitting

Design of the air sparging/VES will be based on the results of the vacuum extraction test. It is assumed for this purpose that vapor extraction is the preferred soil remediation technology. Completion of design and permitting will depend on the permit review and approval process of the various agencies, which will include the following:

- City of Oakland: Plan review and approval and permitting is based on a minimum of 60 days, assuming no major modifications to the design drawings are necessary.
- Bay Area Air Quality Management District: Review and approval of the permit is based on a minimum of 60 days, assuming no major modifications to the design are necessary.
- Pacific Gas & Electric Company (PG&E): The power requirement of the VES may need a special power supply and permit from PG&E. Assuming no delay in the permitting process, the estimated duration of the process is a minimum of 45 days.

The construction permit is subject to city planning and zoning requirements, which may cause delay.

8. Bidding and Equipment Procurement

Bidding for installation and construction of a VES remediation system, including equipment procurement, will require a minimum of 30 to 45 days. Delivery of the equipment will be coordinated with the final construction schedule, with no delay anticipated at this time.

9. Remediation System Installation and Startup

The starting date for air sparging/VES installation is contingent on receipt of all necessary permits, the City of Oakland's requirement for a certificate of deposit before issuing the construction permit; and the bank's regulations regarding issuing a certificate of deposit for another party. When construction begins, no further delay is anticipated except for unforeseen circumstances beyond the control of the consultant, contractor, or BP Oil Company, such as inclement weather, vandalism, equipment defects, power failure, earthquakes, or other natural disasters. Startup of the VES or soil remediation system also assumes no delay, changes in installation, or major equipment defects.

10. Remediation System Operation and Maintenance

The duration of air sparging/vapor extraction system (VES) operation will be based on the results of the air sparging test, vacuum pumping test, and computer modeling. For purposes of this project schedule, however, a minimum of 1 year from the date of system startup is assumed to meet the cleanup levels. The actual duration of air sparging/VES operation to meet cleanup levels will depend on the accuracy of the assumptions used in the computer modeling, long term performance of the system, and site-specific geologic and hydrogeologic characteristics.

System performance will be evaluated for at least 60 days after startup. This will include optimization of system operation, equipment troubleshooting, and system modification, as required to meet expected system efficiency and performance. Continued refinement or improvement of system performance will be part of the ongoing operation and maintenance program.

11. Verification Soil Sampling

Verification soil sampling will be conducted only with concurrence from the regulatory agencies to confirm the effectiveness and completion of soil remediation and for approval of system shutdown and decommissioning.

12. Groundwater Monitoring

Groundwater monitoring will be performed as required during the entire groundwater remediation program.

13. Verification Groundwater Monitoring and Sampling

Based on the results of the groundwater monitoring program and after receipt of regulatory agency approval for shutdown of the groundwater remediation system, verification monitoring and sampling will be performed for at least 1 year to confirm groundwater cleanup and for regulatory approval of system decommissioning.

14. Case Closure Request

A case closure request will be submitted to the regulatory agencies based on the results of the verification soil sampling and groundwater monitoring program. It is assumed that regulatory agency review and approval of the case closure request will take a minimum of 6 months.

15. Remediation System Decommissioning

The soil and groundwater remediation system will be decommissioned after receipt of written approval of the case closure request.

16. Well Abandonment

The groundwater monitoring wells, air sparging point, and vapor extraction wells will be abandoned in accordance with the specifications of the appropriate regulatory agencies.

17. Case Closure Report

A report summarizing the investigation and remediation of petroleum hydrocarbons in the subsurface will be prepared to document the effectiveness of remedial activities and demonstrate that no further action is warranted at the site.

## TASK IMPLEMENTATION ASSUMPTIONS

BP Oil Company Service Station No. 11132  
3201 35th Avenue  
Oakland, California

### GENERAL ASSUMPTIONS

- Schedule assumes that BP Oil Company will continue to operate the station at this site.
- If a site is sold or when a leasehold expires, the schedule assumes that access will not be limited in any way by a future or present property owner.
- Schedule assumes that management of the cleanup activities will not be assumed by a future owner or lessee. If management is assumed by others, BP Oil Company will not be obligated to perform any of the tasks shown on this remediation schedule.
- The length of treatment using the remediation technology are rough estimates. No measurements or calculations have been performed to substantiate these estimates. The schedule may be revised as necessary to reflect actual system performance or effectiveness of remediation plan.
- The remediation technology shown for each site reflects professional judgement based on conditions known at this time. Additional investigation and field pilot testing may be necessary to confirm the cost effectiveness and applicability of the selected technology. If the technology is revised, the schedule will be revised.
- Schedule assumes that the phase of assessment currently underway will adequately define the extent of the release.
- No additional releases will occur in the future.
- No offsite sources of contamination are present.
- Product recovery devices and manual bailing will effectively remove product in wells.
- No changes in regulations or governing regulatory agencies.
- No litigation is filed.
- No attempts by agencies to enforce unwritten policies, unpromulgated guidelines, or points of local decision.

- No migration of contaminants onto site from offsite sources.
- No patent infringement suit filed as a result of the remedial technology employed.

## **SITE SPECIFIC ASSUMPTIONS**

Following are the assumptions and bases used in developing the schedule for the proposed or ongoing tasks and activities for the above site. The projected schedule of the proposed tasks, as presented in the attached timeline, may need to be amended depending on the results of the preceding tasks and changes in the following assumptions or unforeseen circumstances.

### **1. Soil and Groundwater Assessment**

- Schedule assumes that the phase of assessment currently underway will adequately define the extent of the release
- Any and all local, county, state, and federal government agencies (Agencies) will review work plans within 60 days and approve the scope of work without modifications or stipulations
- No delays due to on- or offsite property owner requirements or inability to obtain access
- No delays due to public right-of-way access requirements
- No unusual delays in field activities due to contractor's performance
- No weather delays
- No lowering of groundwater elevations below bottom of wells due to drought conditions or extraction by other water users
- No impacts to property from offsite problems, and no plume mixing with offsite plumes

### **2. Agency Review and Approval of Remediation System**

- Agency accepts and promptly approves permit application
- No special provisions or additional requirements from planning and zoning departments
- No modifications to design required for permitting and construction
- Agency completes review of permit application and issues permit or formal approval within 60 days

- Adequate power supply is available on site
  - No additional utility is needed
  - No new or modified permitting requirements impact this project
3. Groundwater Remediation System Operation and Maintenance
- Theoretical duration of system operation for 1 year to meet cleanup goals
  - No additional onsite releases
4. Air Sparging Test
- No modification of proposed equipment or methods due to agency/permitting requirements
  - Equipment available from manufacturer's stock within 6 weeks
  - Installation of air sparging point(s) not delayed by contractor or access requirements
  - Agency completes review of sparging point permit application within 30 days
5. Feasibility Study and Conceptual Design of Remedial Plan
- Risk assessment is not a viable alternative to remediation
  - No treatability or pilot-scale study of the selected remediation technologies is necessary
6. Report and Remedial Work Plan
- Access to all applicable state, local, and federal records can be obtained without unreasonable delay
7. Remediation System Design and Permitting
- Vapor extraction will only be required onsite
  - Soil vapor extraction is feasible for groundwater remediation enhancement at this site
  - Extent of hydrocarbons in capillary fringe is defined
  - Agency accepts permit application



- No special provisions or additional requirements from planning and zoning departments
- No modifications to design required for permitting and construction
- Agency completes review of permit application and issues permit or formal approval within 60 days
- Adequate power supply is available on site
- No additional utility is needed

8. Bidding and Equipment Procurement

- Acceptable bid submitted by at least one licensed contractor or equipment supplier within the scheduled timeframe
- No bid protest or litigation filed regarding bidding process
- No modification of proposed equipment due to agency/permitting requirements
- Equipment available from manufacturer's stock within 6 weeks
- Equipment delivery not delayed by labor dispute or natural disaster
- Equipment approved by regulatory agencies within schedule timeframe

9. Remediation System Installation and Startup

- No delays in agency inspection
- No delays in underground storage tank removal or replacement
- No additional permit requirements by agencies
- No delays beyond 60 days due to utility company requirements
- No unusual dealer or property owner requirements
- No unusual contractor delays
- No unforeseen onsite conditions
- No weather delays

10. Remediation System Operation and Maintenance

- Theoretical duration of system operation for 1 year to meet cleanup goals
- No additional onsite releases

11. Verification Soil Sampling

- Agency reviews work plan in a timely manner and approves the scope of work
- No delays due to on- or offsite property owner requirements
- No delays due to public right-of-way access requirements
- No unusual delays in field activities due to contractor's performance
- No weather delays

12. Groundwater Monitoring

- Monitoring wells not inadvertently destroyed or covered by grading operations, soil excavation, construction activities, or earthquakes
- Integrity of monitoring wells not compromised by tampering, sabotage, or earthquakes
- No migration of contaminants onto site from offsite sources
- No analytical requirements are imposed by agencies other than those already in effect
- Laboratories do not lose state certification
- Sufficient state-certified laboratories are available

13. Verification Groundwater Monitoring and Sampling

- Petroleum hydrocarbon concentrations in groundwater reduced to below acceptable levels, in compliance with established cleanup levels, or to levels determined from risk assessment, if warranted
- Monitoring wells not inadvertently destroyed or covered by grading operations, soil excavation, construction, or earthquakes
- Integrity of monitoring wells not compromised by tampering, sabotage, or earthquakes
- Minimum duration of 1 year or 1 hydrologic cycle

- No migration of contaminants onto site from offsite sources
- No analytical requirements are imposed by agencies other than those already in effect
- Laboratories do not lose state certification
- Sufficient state-certified laboratories are available

14. Case Closure Request

- Agencies do not revise cleanup levels of petroleum hydrocarbons for groundwater established for closure at the onset of remediation activities
- Groundwater is not impacted by a separate offsite source of contamination

15. Remediation System Decommissioning

- Agency approval to shut down system issued after approval of verification soil sampling results
- Acceptable bid submitted by at least one licensed contractor within the scheduled timeframe
- No bid protest or litigation filed regarding bidding process
- No unusual dealer or property owner requirements
- No unusual contractor delays
- No unforeseen onsite conditions
- No weather delays

16. Well Abandonment

- Agency reviews work plan in a timely manner and approves scope of work
- No delays due to on- or offsite property-owner requirements
- No delays due to public right-of-way access requirements
- No unusual delays in field activities due to contractor's performance
- No weather delays

17. Case Closure Report

- Agencies do not revise cleanup levels of petroleum hydrocarbons for groundwater established for closure at the onset of remediation activities
- Groundwater is not impacted by a new release or separate offsite source of contamination
- Agencies provide written notification of case closure within specified timeframe
- Agencies do not extend timeframe initially agreed upon