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9:10 am, Jan 06, 2010

Alameda County
Environmental Health

December 30, 2009

Ms. Barbara Jakub
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

**Subject: Work Plan for Additional Assessment
76 Service Station No. 3135
845 66th Avenue
Oakland, California
Case No. RO0000408**



Dear Ms. Jakub:

On behalf of ConocoPhillips Company (ConocoPhillips), Delta Consultants (Delta) has prepared this *Work Plan for Additional Assessment* to investigate residual fuel concentrations in soil beneath 76 Service Station Number 3531, located at 845 66th Avenue in Oakland, California (the Site). This work plan has been prepared in response to an Alameda County Environmental Health Department (ACEH) letter dated July 15, 2009. In the letter, the ACEH denied TRC's request for regulatory case closure, stating that a Risk Based Corrective Action Plan (RBCA) prepared as part of the closure request did not include elevated concentrations of total petroleum hydrocarbons as gasoline (TPH-G) and benzene reported in a soil sample collected from the former fuel tank pit excavation. Further, the ACEH had previously mentioned that no confirmation soil samples were collected below the water table within the excavation, even where elevated TPH-G and benzene concentrations were reported.

Prior to a formal request for case closure, Delta is proposing to conduct an additional investigation to determine current concentrations of TPH-G and benzene in soil in the vicinity of the former fuel tank pit, and to determine the locations and depths of any preferential pathways at the site and in the site vicinity..

Concentration data from soil borings will be used in an updated Risk Based Corrective Action (RBCA) Analysis.

This work plan is intended to supersede Delta's Work Plan for Additional Delineation and Update of RBCA Analysis, dated March 16, 2009. Delta has not yet received approval of the March 16, 2009 work plan, and the following scope will allow for a more complete assessment of current concentrations in the vicinity of the former UST excavation area.

A site location map is included as **Figure 1**. There are currently eleven monitoring wells (MW-1 through MW-11) associated with the Site, shown on **Figure 2**.

GENERAL SITE DESCRIPTION

The Site is an active service station located on the northwest corner of San Leandro Street and 66th Avenue in Oakland, California. Station facilities currently include two gasoline underground storage tanks (USTs), a 550-gallon waste oil UST, three dispenser islands under canopies, and a service station building. The product dispensers utilize a balanced vapor recovery system.

Historical data indicate that the site has been a service station since 1947. Renovation of the site first occurred in 1967, when the size of the site expanded to its current configuration (GR 2000).

SITE BACKGROUND

1989: Two 10,000-gallon gasoline USTs, one 280-gallon waste oil UST and product piping were removed from the site. Confirmation soil samples collected from the UST pit indicated low residual concentrations of total petroleum hydrocarbons as gasoline (TPH-G), benzene, and total oil and grease (TOG). After confirmation soil sampling, approximately 5,000 gallons of groundwater were removed from the UST pit. A groundwater sample collected after recharge of the UST pit was reported to contain TPH-G at 7,900 parts per billion (ppb) and benzene at 850 ppb. Confirmation soil samples collected from the product piping trench indicated low residual concentrations of TPH-G and benzene (KEI 1990).

April 1990: Two shallow soil borings (EB-1 and EB-2) were advanced and three groundwater monitoring wells (MW-1, MW-2 and MW-3) were installed to depths of approximately 22 feet below ground surface (bgs) (KEI 1990).

August 1990: Three groundwater-monitoring wells (MW-4 through MW-6) were installed at the site (KEI 1990).

January 1991: A hydropunch survey was performed at the site (KEI 1991).

March 1991: The pre-1967 UST pit was over-excavated, and two concrete slabs were removed from depths of approximately 8.5 and 10 feet bgs. Approximately 2,000 cubic yards of impacted soil was removed from the site and properly disposed. Over-excavation was limited by existing product piping. Confirmation soil samples from the former UST pit indicated low to moderate residual concentrations of TPH-G. Approximately 20,000 gallons of groundwater were pumped from the former UST pit prior to backfilling (KEI 1991).

September 1992: Three offsite groundwater monitoring wells (MW-7, MW-8 and MW-9) were installed offsite (KEI 1992).

April 1993: One groundwater monitoring well (MW-10) was installed at the site (KEI 1993).

August 1998: Oxygen Releasing Compound (ORC) was placed in monitoring well MW-6 to assist with biological attenuation of hydrocarbon compounds. Starting in 1999, the following bioattenuation parameters have been measured at the site: nitrate, sulfate, ferrous iron, dissolved oxygen, and, oxidation-reduction potential. According to Gettler-Ryan, Inc.'s (GR) Annual Monitoring and Sampling Report dated April 19, 2001, review of these parameters indicates that bioattenuation is occurring at the site (GR 2001).

July 2001: One offsite monitoring well (MW-11) was installed to a depth of 20 feet bgs (GR 2001)..

October 2003: Site environmental consulting responsibilities were transferred to TRC.

SENSITIVE RECEPTOR SURVEY

February 27, 2006: TRC completed a sensitive receptor survey for the site. According to the California Department of Water Resources (DWR) records, no water supply wells were located within a one-half mile distance of the Site. Surface water bodies within one-half mile of the Site include Damon Slough and Lion Creek, located approximately 775 feet south and 525 feet southeast of the site, respectively.

PROPOSED SITE INVESTIGATION

Delta proposes the advancement of three on site soil borings in order to investigate residual petroleum hydrocarbons in soil beneath the site in the vicinity of the former fuel UST excavation pit in the vicinity of previous soil boring EB-2, and soil samples SW10 and SW2(12). The proposed soil boring locations are shown in **Figure 2**. Delta also proposes a

preferential pathway study at the site and in the site vicinity to determine whether utilities in the area could act as conduits for petroleum hydrocarbons and constituents.

Former Fuel Underground Storage Tank Area

Three soil borings (SB-1, SB-2 and SB-3) will be advanced adjacent to previous boring EB-2, and soil samples SW10 and SW2(12), respectively (**Figure 2**). SB-1 will be advanced directly adjacent to soil boring EB-2. Boring EB-2 was previously advanced to a depth of 10.5 feet below ground surface (bgs). Concentrations of TPH-G and benzene were reported in EB-2 at 12,000 mg/kg and 84 mg/kg, respectively at a depth of 9 feet bgs (deepest soil sample collected). Boring SB-1 will be advanced to approximately 20 feet, and soil samples will be continuously sampled from 10 to 20 feet bgs in order to verify soil concentrations previously reported at 10.5 feet and to vertically define the extent of soil contamination. Three soil samples are anticipated to be collected from SB-1, from a depth of 10.5 feet bgs and from 20 feet bgs. No soil samples are anticipated to be collected above 10 feet bgs due to the presence of artificial backfill material.

Sample SW10 was not over excavated to the west due to proximity to a product line. Boring SB-2 will be advanced approximately 5 feet to the west of sample SW10 in order to safely obtain a representative soil sample without risking damage to the product line. Concentrations of TPH-G and benzene were reported in SW10 at 1,400 mg/kg and 18 mg/kg, respectively at a depth of 11 feet bgs. Boring SB-2 will be advanced to a depth of approximately 20 feet in order to obtain current soil concentrations in the vicinity of SW-10, as well as obtain confirmation soil samples below SW10. A maximum of three soil samples are anticipated to be collected from SB-2.

TPH-G and benzene were reported in soil sample SW2(12) at concentrations of 2,400 mg/kg and 38 mg/kg, respectively at a depth of 11 feet bgs. Sample SW2(12) was subsequently over excavated and concentrations were confirmed with sample SW2(30). Horizontally, the concentration reported at this sample point has been defined. In order to vertically define hydrocarbons and constituents in this area,, SB-3 will be advanced adjacent to SW2(12) to a depth of approximately 15 feet bgs. Two soil samples are anticipated to be collected from SB-3, at a depth of 11.5 feet bgs to obtain current soil concentrations in the vicinity of SW-10, as well as obtain confirmation soil samples below SW2(12). No soil samples are anticipated to be collected above 10 feet bgs due to the presence of artificial backfill material.

All soil samples will be screened in the field for volatile organic compounds (VOCs) using a photo-ionization detector (PID). A lithologic description of each soil sample and PID readings will be recorded by a Delta geologist on a boring log form. A maximum of three soil samples will be submitted for laboratory analysis from each boring at the specified intervals outlined above, in addition to depths exhibiting high PID readings or significant changes in lithology.

Each boring will be advanced using a hollow-stem auger drilling rig equipped with 6-inch outer diameter auger flights. During drilling, soil samples will be collected at five-foot intervals to the total depth. Upon completion, each boring will be filled with neat Portland cement to approximately three inches below grade, capped with cement to grade and dyed black to match surrounding asphalt.

Proposed Analytical for Soil and Groundwater Samples

Delta will request that the soil samples from SB-1, SB-2 and SB-3 be analyzed for TPH-G, BTEX compounds and MTBE by EPA Method 8260B. In addition, a composite soil sample for the purpose of waste profiling and disposal will be collected from soil cuttings generated during investigation activities and will be additionally analyzed for total lead.

Soil and groundwater samples selected for laboratory analysis will be individually labeled, registered on a chain-of-custody form, and placed on ice pending delivery to a certified analytical laboratory. Strict chain-of-custody protocols will be followed during the transport of the samples.

Down-hole tools will be cleaned prior to and between each boring to prevent cross-contamination. Waste materials will be stored onsite in DOT approved 55-gallon drums pending proper disposal by a ConocoPhillips-approved waste hauling firm. Following soil boring completion all field point data, soil and groundwater sample analytical data will be uploaded to the GeoTracker system per current standards.

Preferential Pathway Study

In addition to additional soil investigation, Delta proposes to conduct a preferential pathway study to identify nearby water supply wells and bodies of water within a half mile of the site. In addition, a conduit study will be performed to identify utility lines and trenches beneath the site and in the site vicinity that have a potential for vertical and lateral migration of hydrocarbons and constituents. Utilities at the site and site vicinity including sewer lines,

storm drains, pipelines, and trench backfill will be identified in terms of depth and location, and will be presented on a utility map of the site, and on geologic cross sections. Data will be obtained by employing a utility locator and by contacting local utility companies to obtain and review local utility maps.

SCHEDULE

Delta will obtain all necessary access agreements and permits following submittal of this work plan and will commence field activities within 30 days of receipt of work plan approval by ACEH. **If a response is not received from the ACEH following 60 days of agency receipt of this work plan, Delta will proceed with obtaining drilling permits and will conduct field activities as proposed.**

REPORTING

Upon completion of the fieldwork, Delta will prepare a report describing field activities, methods, and analytical results. Delta will include recommendations for additional assessment work at the site, or case closure, as appropriate.

It is further estimated that the final report will be ready for submittal approximately 45 days after receipt of the sample analytical results.

REMARKS

The descriptions, conclusions, and recommendations contained in this document represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. For any reports cited that were not generated by Delta, the data from those reports is used "as is" and is assumed to be accurate. Delta does not guarantee the accuracy of this data for the referenced work performed nor the inferences or conclusions stated in these reports. This document is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this document were conducted. This document is intended only for the use of Delta's Client and anyone else specifically listed on this document. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this document.

If you have any questions regarding this work plan or need and additional information about this Site, please do not hesitate to contact the undersigned at (408) 826-1863.

Sincerely,

DELTA CONSULTANTS

Yvette Pico
FOR

Nadine Periat

Senior Staff Geologist

Lia Holden

Lia Holden, PG

Geologist - Project Manager



Attachments:

Attachment A - Agency Correspondence

Figure 1 - Site Location Map

Figure 2 - Site Map with Proposed Boring Locations

Cc: Mr. Terry Grayson, ConocoPhillips, Sacramento, California (electronic copy)

REFERENCES:

- Kaprealian Engineering Incorporated, Soil Sampling Report, Unocal Service Station #3135, 845 – 66th Avenue, Oakland, California, January 15, 1990.
- Kaprealian Engineering Incorporated, Preliminary Soil and Groundwater Investigation, Unocal Service Station #3135, 845 – 66th Avenue, Oakland, California, May 31, 1990.
- Kaprealian Engineering Incorporated, Groundwater Sampling Study, Unocal Service Station #3135, 845 – 66th Avenue, Oakland, California, April 22, 1991.
- Kaprealian Engineering Incorporated, Stockpiled Soil Sampling Report, Unocal Service Station #3135, 845 – 66th Avenue, Oakland, California, April 26, 1991.
- Kaprealian Engineering Incorporated, Continuing Groundwater Investigation at Unocal Service Station #3135, 845 – 66th Avenue, Oakland, California, December 10, 1992.
- Kaprealian Engineering Incorporated, Continuing Groundwater Investigation at Unocal Service Station #3135, 845 – 66th Avenue, Oakland, California, June 10, 1993.
- Gettler- Ryan Inc., Quarterly Monitoring Report, Tosco (Unocal) Service Station # 3135, 845 – 66th Avenue, Oakland, California, September 30, 1998.
- Gettler- Ryan Inc., Site Conceptual Model, Tosco (Unocal) Service Station # 3135, 845 – 66th Avenue, Oakland, California, May 19, 2000.
- Gettler- Ryan Inc., Quarterly Monitoring Report, Tosco (76) Service Station No. 3135, 845 – 66th Avenue, Oakland, California, September 200, 2001.

ATTACHMENT A
Agency Correspondence

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

July 15, 2008

Mr. Bill Borgh
ConocoPhillips
76 Broadway
Sacramento, CA 95818

Subject: Fuel Leak Case No. RO0000408 and Geotracker Global ID T0600101488, Unocal #3135, 845 66th Ave, Oakland, CA

Dear Mr. Borgh:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the documents entitled, *Site Conceptual Model - Addendum*, dated February 27, 2006 and Semi-Annual Monitoring Report dated April 16, 2008 which were prepared by TRC. These reports indicate that groundwater concentrations are declining and a RBCA model was included in the addendum. TRC requested case closure in their RBCA but did not use the maximum soil results stating in a June 1, 2006 e-mail that fifteen year old benzene results should not be considered relevant. However, no confirmation samples were submitted to justify this assertion. There is also a statement saying the land use is changing, however, future use has not been reported to us and has not been considered in reports for this site. Based upon our review, ACEH cannot consider case closure for the subject site at this time. This decision to deny closure is subject to appeal to the State Water Resources Control Board (SWRCB), pursuant to Section 25299.39.2(b) of the Health and Safety Code (Thompson-Richter Underground Storage Tank Reform Act - Senate Bill 562). Please contact the SWRCB Underground Storage Tank Program at (916) 341-5851 for information regarding the appeals process.

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

TECHNICAL COMMENTS

1. **Dissolved Contaminant Plume Definition.** Dissolved contaminant concentrations remaining on-site are reported at maximums of 3,400 micrograms per liter ($\mu\text{g/L}$) total petroleum hydrocarbons as gasoline, 9.8 $\mu\text{g/L}$ benzene and 35 $\mu\text{g/L}$ methyl tertiary butyl ether (MTBE) in the groundwater samples collected in March 2008. However, Tertiary Butyl Alcohol (TBA) has not been analyzed in groundwater in all wells since March 2003 and the detection levels were elevated at that time. Include the following analyses in your next semi-annual monitoring event in September 2008 so the ACEH staff can review the site for

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potential closure: total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015M, benzene, toluene, ethylbenzene, toluene, xylenes, MTBE, ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary amyl methyl ether (TAME), TBA, ethylene dibromide (EDB), ethylene dibromide (EDB), and 1,2-dichloroethane (1,2-DCA) by EPA Method 8260. Analyze only wells near the current USTs, dispensers and piping (MW-1, MW-2, MW-3, and MW-6) for ethanol by EPA Method 8260. Also, the latest semi-annual monitoring report was not uploaded to the ACEH ftp site. Please upload the report by the date requested below.

2. **Risk-Based Corrective Action Plan.** Soil samples collected at the site indicate that the lateral and vertical extent of the contamination is predominantly defined. However, one soil sample left in place exceeds environmental screening levels (ESLs) with 1,400 milligrams per kilogram (mg/Kg) TPHg, and 18 g/Kg benzene. The RBCA prepared for this site, did not use these sample results nor was there a discussion on which soils were used for the risk evaluation. An e-mail indicates that the site use may be changing but it does not say what the use will be and this information is not considered in the RBCA. It may be appropriate to collect and analyze confirmation soil and water samples in the vicinity of the residual benzene to evaluate your site. We request that you prepare a work plan to advance a confirmation soil boring to investigate residual contaminant concentrations in soil adjacent to SW10 by the date requested below.
3. **Preferential Pathway Study.** TRC performed portions of a preferential pathway study which included a well survey and nearby receptor survey. The well survey did not identify any nearby wells. However, it identified Lion Creek and Damon Slough as nearby receptors. No evaluation or conclusions were presented as to whether these receptors were impacted. Please include an evaluation in the report requested below. Also the study did not include an evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) as required by ACEH. Please perform a conduit study that details the remaining potential migration pathways and potential conduits (utilities, pipelines, etc.) for vertical and lateral migration that may be present in the vicinity of the site. Please include maps and cross-sections illustrating the location and depth of all utility lines and trenches within and near the site and plume areas(s) as part of your study and include it in the report requested below.

REQUEST FOR INFORMATION

ACEH's case file for the subject site contains only the electronic files listed on our website at <http://www.acgov.org/aceh/index.htm>. You are requested to submit copies of all other reports related to environmental investigations for this property (including Phase I reports) by August 15, 2008.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Barbara Jakub), according to the following schedule so that we can complete our closure review for this site:

- **October 17, 2008 – Work Plan**

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an

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appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

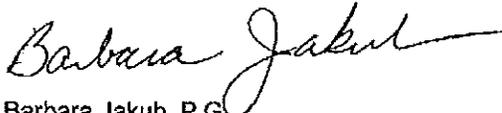
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

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

If you have any questions, please call me at (510) 639-1287 or send me an electronic mail message at barbara.jakub@acgov.org.

Sincerely,



Barbara Jakub, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Mr. Daniel Davis, Delta Environmental Consultants, Inc., 11050 White Rock Road,
Rancho Cordova, CA 95670
Donna Drogos, ACEH
Barbara Jakub, ACEH
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	ISSUE DATE: July 5, 2005
	REVISION DATE: December 16, 2005
	PREVIOUS REVISIONS: October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

- 1) Obtain User Name and Password:
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to dehloptoxic@acgov.org
or
 - ii) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
 - b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.**

- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape and Firefox browsers will not open the FTP site.
 - b) Click on File, then on Login As.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload)

Woodburne, Keith

From: Woodburne, Keith
Sent: Thursday, July 20, 2006 10:29 AM
To: 'Hwang, Don, Env. Health'
Cc: 'Shelby.S.Lathrop@conocophillips.com'; Drogos, Donna, Env. Health; Kemnitz, Steve
Subject: FW: 76 Station No. 3135 located at 845 66th Avenue, Oakland

Don,

Here's a more clear synopsis of the excavation and confirmation sampling that took place during March 1991 at Station No. 3135 Oakland. I hope this clarifies the disposition of soil, specifically the fate of the sample locations SW2(12) and EB2. Attached is the KEI report from which this information was obtained and a revised version of Figure 3 - Hydrocarbon Distribution In Soil showing more clearly the intermediate and final stages of the March 1991 excavation and confirmation soil sample locations.

April 27, 1990: KEI completed soil boring EB2 (KEI, 1990) and soil samples collected at depths of 7 and 9 feet below grade (fbg) contained elevated concentrations of TPH-g and benzene (Table 4, KEI 1993).

March 12, 1991: KEI observed the excavation of contaminated soil in the immediate vicinity of the previously drilled exploratory borings EB1 and EB2. During the excavation, concrete slabs were encountered at depths of approximately 8.5 and 10 fbg.

March 19, 1991: KEI returned to the site to complete the removal of the concrete slabs and to install shoring along the north-easterly side of the 66th Avenue pump islands, to avoid potential damage during excavation. The concrete was removed and the soil beneath the concrete excavated to a depth of 1 foot below groundwater, a total depth of 11 fbg.

March 21 and 22, 1991: KEI continued excavation of contaminated soil and collected sidewall samples, including sample SW2 (12) from the intermediate extent of the excavation (prior to beginning additional over excavation).

April 11, 1991: KEI collected confirmation soil samples from the sidewalls of the final excavation boundary including sample SW2 (30). However, KEI was unable to further excavate laterally in the vicinity of sample point SW10 due to the location of existing product piping.

The information in this summary is contained in the Site Description and Background section of the June 10, 1993 Continuing Groundwater Investigation and Quarterly Monitoring Report (KEI, 1993). I've attached a pdf copy of the report with the relevant paragraphs highlighted. It is clear from this summary that the soil impacts from sample locations EB2 and SW2(12) have been removed. The only remaining potential soil impact is the sample location SW10, which could not be over excavated due to the location of product piping. However, that result is 15 years old and has likely attenuated over time. Nevertheless, a re-run of the RBCA including the result from SW10 did not change the results. Benzene did not exceed the site specific target level. Attached is a pdf of the RBCA re-run for reference.

Based on the data presented in the previously submitted SCM Addendum and additional explanation of the soil disposition above, and on the results of the RBCA re-run including the data from SW10, TRC again recommends no further action and requests the site be referred for closure.

Let me know if you have any additional questions regarding the site. If you still have concerns regarding the site and our recommendation for NFA and closure, I would recommend we have another face-to-face meeting at your office to discuss the site details further. At that time we could also discuss the path forward for a number of other ConocoPhillips sites and set some concrete deadlines for completion of that work.

Regards,

Keith Woodburne, P.G.
Senior Project Geologist
TRC
1590 Solano Way, Suite A
Concord, CA 94520
T: 925-688-2488
F: 925-688-0388
C: 925-260-1373

7/31/2006

From: Woodburne, Keith
Sent: Thursday, June 01, 2006 2:15 PM
To: 'Hwang, Don, Env. Health'
Cc: Shelby Lathrop (Shelby.S.Lathrop@conocophillips.com); Kemnitz, Steve
Subject: RE: 76 Station No. 3135 located at 845 66th Avenue, Oakland

Don,

It may not be entirely clear from Figure 3 since there's a lot of information over a small area, but sample locations EB2 and SW2 (12) were subsequently over excavated, based in part on those results. The results from exploratory boring EB2 prompted the over excavation in that area, and the sidewall sample SW2(12) prompted additional over excavation to the north-northwest. Sidewall sample SW2(30) was collected following over excavation of the area from which sample SW2(12) was collected. That's why sample location SW2(30) is shown further north-northwest of sample location SW2(12) on Figure 3.

Over excavation of sample location SW10 was not possible due to the location of product lines. However, that result is over 15 years old and the benzene concentration at that location has likely degraded significantly since 1991. If you feel it necessary, we could re-run the RBCA and include the SW10 benzene result of 18 mg/kg. However, I don't believe that result would change the outcome of the risk assessment.

The information regarding the soil excavation and confirmation sample for those three results are documented in the June 10, 1993 Continuing Ground Water Investigation and Quarterly Report prepared by Kaprealian Engineering. Let me know if you'd like a copy of that report for reference or if you feel it necessary to re-run the RBCA with the SW10 benzene result of 18 mg/kg. However, I don't believe that one result will change the outcome of the RBCA and I don't think a 15 year old benzene result should be considered relevant.

Let me know if you have any additional questions.

Thanks,
Keith

Keith Woodburne, R.G.
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From: Hwang, Don, Env. Health [mailto:don.hwang@acgov.org]
Sent: Wednesday, May 31, 2006 3:20 PM
To: Woodburne, Keith
Subject: RE: 76 Station No. 3135 located at 845 66th Avenue, Oakland

Keith, I looked at Figure 3 again, I can't confirm that these areas have been excavated beyond the sample points. Don

From: Woodburne, Keith [mailto:kwoodburne@TRCSOLUTIONS.com]
Sent: Friday, May 19, 2006 3:15 PM
To: Hwang, Don, Env. Health
Subject: RE: 76 Station No. 3135 located at 845 66th Avenue, Oakland

Don,

Those samples were collected from areas subsequently over excavated. Therefore, that soil is no longer onsite and those concentrations not applicable to the RBCA. I believe the boundary of the excavations at the site are shown on Figure 3.

7/31/2006

Let me know if you have any additional questions regarding the RBCA or our request for site closure. If you recall, this is not longer a ConocoPhillips owned property and we are working to close the site quickly in anticipation of redevelopment activities that will ultimately make additional work onsite very difficult.

Thanks and have a good weekend.

Keith

Keith Woodburne, R.G.
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From: Hwang, Don, Env. Health [mailto:don.hwang@acgov.org]
Sent: Thursday, May 18, 2006 5:02 PM
To: Woodburne, Keith
Cc: Shelby.S.Lathrop@conocophillips.com
Subject: 76 Station No. 3135 located at 845 66th Avenue, Oakland

Keith, ? RBCA: Where analytical data for soil source zone were entered, why were the highest benzene concentrations omitted, EB2 84 mg/kg, SW2(12) 38 mg/kg, SW10 18 mg/kg, etc. Don 510-567-6746

FIGURES

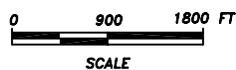
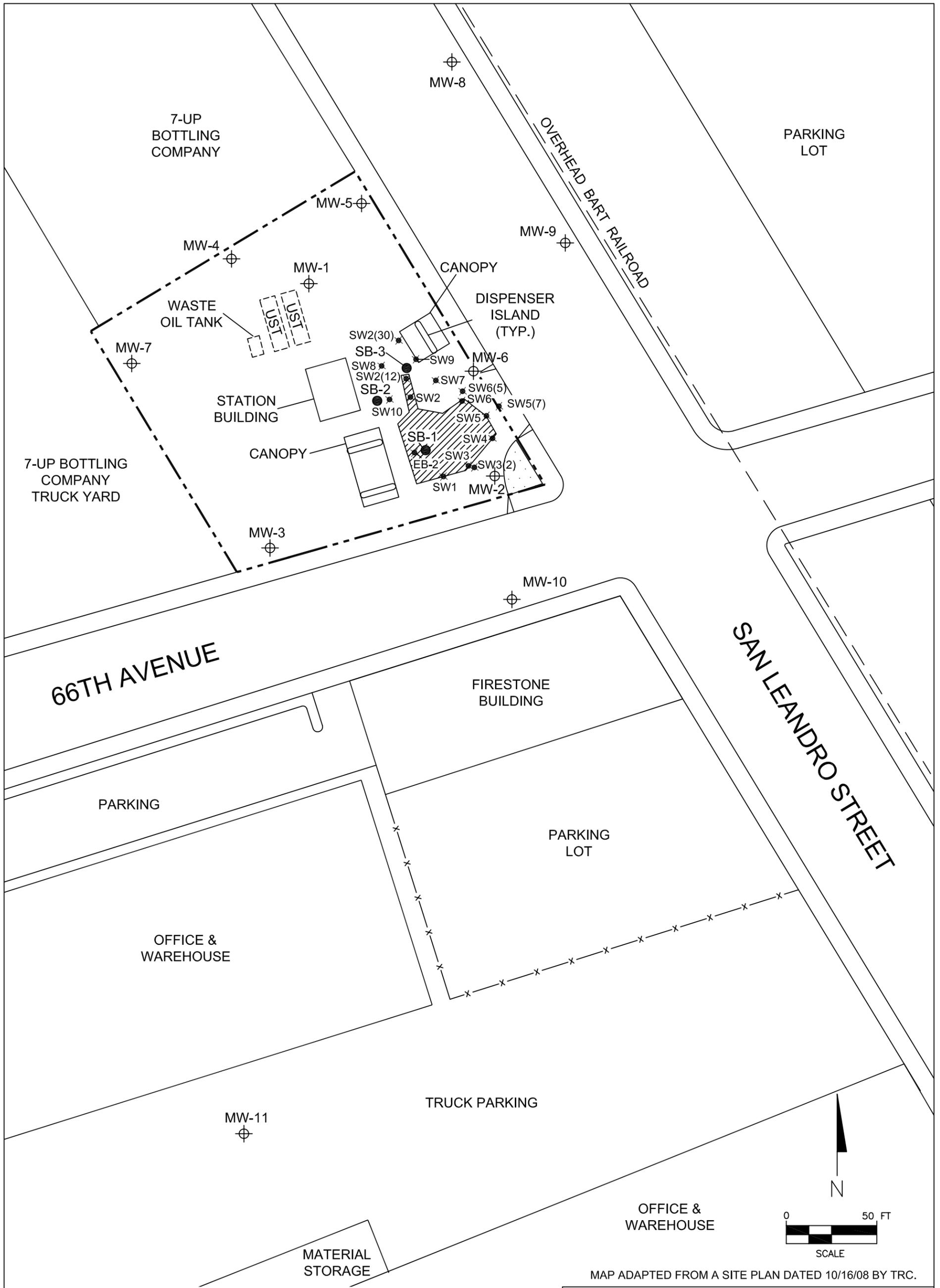


FIGURE 1
SITE LOCATION MAP

76 STATION 3135
845 66TH AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. C103135	DRAWN BY JH 02/25/09
FILE NO. 3135-SiteLocator	PREPARED BY AB
REVISION NO.	REVIEWED BY JR





LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- x- FENCE
- MW-11 ⊕ MONITORING WELL
- SW1 ✱ SOIL SAMPLE LOCATION
- SB-1 ● PROPOSED BORING LOCATION
- ▨ EXCAVATION BOUNDARY

MAP ADAPTED FROM A SITE PLAN DATED 10/16/08 BY TRC.

FIGURE 2
SITE PLAN

76 STATION 3135
845 66TH AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. C103135	PREPARED BY NP	DRAWN BY JH
DATE 12/08/09	REVIEWED BY LH	FILE NAME 76-3135

