

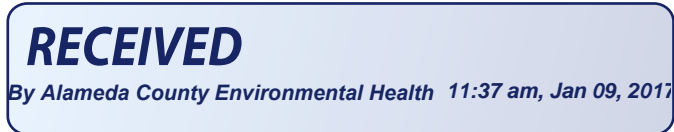
ExxonMobil
Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611
510 547 8196 Telephone
510 547 8706 Facsimile

Jennifer C. Sedlachek
Project Manager

ExxonMobil

January 6, 2017

Ms. Karel Detterman
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577



RE: Former Mobil RAS #99105/6301 San Pablo Avenue, Oakland, California.

Dear Ms. Detterman:

Attached for your review and comment is a copy of the letter report entitled *Response to Request for Work Plan Addendum*, dated January 6, 2017, for the above-referenced site. The report was prepared by Cardno, of Petaluma, California, and details activities at the subject site.

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

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,

A handwritten signature in black ink that reads "J Sedlachek".

Jennifer C. Sedlachek
Project Manager

Attachment: Cardno's *Response to Request for Work Plan Addendum*, dated January 6, 2017

cc: w/ attachment
Mr. Leroy Griffin, Oakland Fire Department
Messrs. On Dan and Nathan Lam

w/o attachment
Mr. Scott Perkins, Cardno



January 6, 2017
Cardno 2783C.W04

Ms. Jennifer C. Sedlachek
ExxonMobil Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611

Cardno

601 N. McDowell Boulevard
Petaluma, CA 94954
USA

Phone: +1 800 382 9105
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Contractor: #997036

www.cardno.com

SUBJECT Response to Request for Work Plan for Addendum
Former Mobil Service Station 99105
6301 San Pablo Avenue, Oakland, California

Ms. Sedlachek:

At the request of ExxonMobil Environmental Services (EMES), on behalf of ExxonMobil Oil Corporation, Cardno prepared this response to the request for a work plan addendum for the subject site. The purpose of this letter is to respond to comments made by the Alameda County Health Care Services Agency (County) in correspondence dated November 8, 2016 (Appendix A), regarding Cardno's *Work Plan for Additional Soil Vapor Assessment* (work plan), dated September 8, 2016 (Cardno, 2016).

SITE DESCRIPTION

The site (Assessor's Parcel Number 16-1455-10) is located at 6301 San Pablo Avenue, on the northwest corner of San Pablo Avenue and 63rd Street, in Oakland, California, as shown in the Site Vicinity Map (Plate 1). The site was operated as a Mobil service station from 1951 to 1980, then used as a rental car lot, and is currently an automobile oil change facility. Four 2,000-gallon gasoline USTs and one 350-gallon used-oil UST were present on the property. The tanks were not used after 1980 and were removed in 1994.

RESPONSE TO COMMENTS

Comments from the County's November 8, 2016 correspondence are paraphrased in bold font followed by Cardno's response.

Australia • Belgium • Canada • Colombia • Ecuador • Germany • Indonesia •
Kenya • New Zealand • Nigeria • Papua New Guinea • Peru • Philippines • Singapore •
United Arab Emirates • United Kingdom • United States • Operations in over 100 countries

January 6, 2017
Cardno 2783C.W04 Former Mobil Service Station 99105, Oakland, California

The County requests preparation of a work plan addendum describing permanent sub-slab soil vapor probe installation and sampling.

Cardno agrees that additional soil vapor assessment at the site is warranted; however, Cardno recommends pursuing a step-wise approach prior to the installation of permanent sub-slab sampling points. The current soil vapor sampling wells are screened with sand pack depths ranging from 4.5 to 6 feet bgs. The wells proposed in the work plan are screened between 1.5 and 2 feet bgs and will provide valuable information about the attenuation of concentrations with depth. Installing shallow, near-slab wells is one of the recommended approaches endorsed in the *Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites* (EPA, 2015). Should the results of the shallow soil vapor wells indicate an unacceptable risk, then sub-slab sampling may be appropriate.

The installation of sub-slab wells is significantly more invasive to the property owners, patrons, and tenants and the collection of additional outdoor or near-slab samples allows for the collection of more data from a wider area with less limitations as compared to performing sampling within an occupied, active building.

Please provide a figure delineating the extent of the office area, and the depth and location of excavation confirmation sample results

Cardno recommends proceeding with the proposed shallow soil vapor well installation and including an updated figure showing the office area and previous excavations in the results report.

CONTACT INFORMATION

The responsible party contact is Ms. Jennifer C. Sedlachek, ExxonMobil Environmental Services Company, 4096 Piedmont Avenue #194, Oakland, California, 94611. The consultant contact is Mr. Scott Perkins, Cardno, 601 North McDowell Boulevard, Petaluma, California, 94954. The agency contact is Ms. Karel Detterman, Alameda County Environmental Health Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, California, 94502-6577.

LIMITATIONS

For documents cited that were not generated by Cardno, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

January 6, 2017
 Cardno 2783C.W04 Former Mobil Service Station 99105, Oakland, California

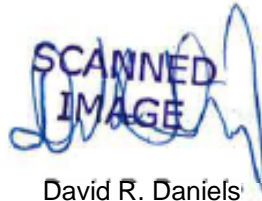
This document and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

Please contact Mr. Scott Perkins, Cardno's project manager for this site, at scott.perkins@cardno.com or at (707) 766-2000 with any questions or comments regarding this work plan.

Sincerely,


 SCANNED
 IMAGE

Scott Perkins
 Senior Project Manager
 for Cardno
 707 766 2000
 Email: scott.perkins@cardno.com


 SCANNED
 IMAGE

David R. Daniels
 P.G. 8737
 for Cardno
 707 766 2000
 Email: david.daniels@cardno.com



Enclosures:

References

Acronym List

Appendix A Correspondence

cc: Ms. Karel Detterman, Alameda County Environmental Health Services, 1131 Harbor Bay Parkway, Second Floor, Alameda, California, 94502

Mr. Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa, Suite 3341, Oakland, California, 94612

Messrs. On Dan and Nathan Lam, 200 El Dorado Terrace, San Francisco, California, 94112

January 6, 2017
Cardno 2783C.W04 Former Mobil Service Station 99105, Oakland, California

REFERENCES

Cardno. September 8, 2016. *Work Plan for Additional Soil Vapor Assessment, Former Mobil Service Station 99105, 6301 San Pablo Avenue, Oakland, California.*

United States Environmental Protection Agency (EPA). June 2015. *Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites.*

January 6, 2017

Cardno 2783C.W04 Former Mobil Service Station 99105, Oakland, California

ACRONYM LIST

µg/L	Micrograms per liter	NEPA	National Environmental Policy Act
µs	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acfm	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
bgs	Below ground surface	OSHA	Occupational Safety and Health Administration
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	OVA	Organic vapor analyzer
CEQA	California Environmental Quality Act	P&ID	Process & Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic hydrocarbon
COC	Chain of Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethene or perchloroethylene
DIPE	Di-isopropyl ether	PID	Photo-ionization detector
DO	Dissolved oxygen	PLC	Programmable logic control
DOT	Department of Transportation	POTW	Publicly owned treatment works
DPE	Dual-phase extraction	ppmv	Parts per million by volume
DTW	Depth to water	PQL	Practical quantitation limit
EDB	1,2-dibromoethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HVOC	Halogenated volatile organic compound	SVOC	Semi-volatile organic compound
J	Estimated value between MDL and PQL (RL)	TAME	Tertiary amyl methyl ether
LEL	Lower explosive limit	TBA	Tertiary butyl alcohol
LPC	Liquid-phase carbon	TCE	Trichloroethene
LRP	Liquid-ring pump	TOC	Top of well casing elevation; datum is msl
LUFT	Leaking underground fuel tank	TOG	Total oil and grease
LUST	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
mg/m ³	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon
NAPL	Non-aqueous phase liquid		

APPENDIX A

CORRESPONDENCE



November 8, 2016

Jennifer Sedlachek
ExxonMobil
4096 Piedmont, Ave., #194
Oakland, CA 94611
(Sent via e-mail to: jennifer.c.sedlachek@exxonmobil.com)

Dan On and Nathan and Binh Lam, etal
200 El Dorado Terrace
San Francisco, CA 94112-1757

Subject: Work Plan Addendum Request for Fuel Leak Case No. RO0000445 and Geotracker Global ID T0600101855, Mobil#99-105/Cars Rent A Car, 6301 San Pablo Avenue, Oakland, CA 94608

Ladies and Gentlemen:

Thank you for the recently submitted *Work Plan for Additional Soil Vapor Assessment* (Work Plan) dated September 8, 2016 prepared by Cardno for the subject site. Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file including the Work Plan for the site.

Based on ACDEH staff review of the case file and the referenced report ACDEH requests that you address the following technical comments and send us the document requested below.

TECHNICAL COMMENTS

1. **Work Plan Modifications** – The referenced work plan proposes a series of actions with which ACDEH is in general agreement; however, because of persistent and elevated soil vapor concentrations detected in Soil Vapor Sampling Well VW4 and the potential for vapor intrusion to indoor air within the office, ACDEH requests instead preparation of a work plan addendum describing permanent sub-slab probe installation and seasonal sampling in the office area in accordance with the Department of Toxic Substances Control (DTSC) *Advisory Active Soil Gas Investigations* (July 2015). Additionally, please include the following to support the addendum:
 - a. **Location of the Pre-Development Excavation:** To optimize placement of sub-slab probes in the unexcavated areas of in office area, please provide a figure delineating the areal extent of the office area, and the depth and location of excavation confirmation soil sample results.
 - b. **Public Notifications:** Please include a description of tenant notification prior to sub-slab sampling in accordance with DTSC's 2012 *Vapor Intrusion Public Participation Advisory*. Please submit a draft Public Notice to ACDEH for review prior to distribution to the tenant by January 6, 2017.
 - c. **Standard Operating Procedures (SOPs):** Please submit the sub-slab sampling SOPs with the Work Plan Addendum. ACDEH concurs with the laboratory analyses proposed in the Work Plan.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACDEH ftp site (Attention: Karel Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

Ladies and Gentlemen
RO0000445
November 8, 2016 Page 2

- **January 9, 2017** – Work Plan Addendum for *Sub-Slab Vapor Assessment*,
File to be named: RO445_WP_ADEND_R_yyyy-mm-dd

This report is 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. Online case files are available for review at the following website: <http://www.acgov.org/aceh/lop/ust.htm>

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please send me an e-mail message at karel.detterman@acgov.org or call me at (510) 567-6708.

Sincerely,

Karel Detterman, PG
Hazardous Materials Specialist

Enclosures: Attachment 1 - Responsible Party(ies) Legal Requirements/Obligations
ACDEH Electronic Report Upload (ftp) Instructions

cc: Scott Perkins, Cardno, 601 N. McDowell Blvd., Petaluma, CA 94954, (Sent via e-mail to: Scott.Perkins@cardno.com)
Paresh Khatri, ACDEH, (Sent via e-mail to: paresh.khatri@acgov.org)
Dilan Roe, ACDEH (Sent via E-mail to: dilan.roe@acgov.org)
Karel Detterman, ACDEH (Sent via E-mail to: karel.detterman@acgov.org)
GeoTracker, Electronic Case File