ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY

COLLEEN CHAWLA, Agency Director



June 25, 2018	
Mercedes Benz of Oakland/Euro Motors Oakland, Inc.	David Barsotti
c/o Ash Zaki	2915 Broadway
2915 Broadway	Oakland CA, 94611-5710
Oakland CA, 94611	
(Sent via E-mail to ash.zaki@euromotosca.com)	
	Jules Barsotti
Rose M. Hubler	
	2915 Broadway
340 29th Street	Oakland CA, 94611-5710
Oakland CA, 94611-5710	
	Shirley H. Guthrie
Jules Barsotti & Alfred S & Margaret G. Hooper	
	340 29th Street
2915 Broadway	Oakland CA, 94609-3401
Oakland CA, 94611-5710	
	Geraldine A. Barsotti, Trustee
Jules M. Barsotti	5 W Shore Road
	Belvedere CA, 94920
2915 Broadway	
Oakland CA, 94611-5710	GAB Associates LLC
Jules M. and Geraldine A Barsotti, Trustees	5 W Shore Road
	Belvedere CA, 94920-2461
2915 Broadway	

2915 Broadway Oakland CA, 94611-5710

Subject: Review of Subsurface Investigation Report and Request for Work Plan Leaking Underground Storage Tank (LUST) Cleanup Site Case No. RO0003220 GeoTracker Global ID T10000009111 Mercedes Benz of Oakland 340 29th Street, Oakland, CA 94609

Dear Responsible Party(ies):

Alameda County Department of Environmental Health (ACDEH) has reviewed the case file associated with the above referenced property (the "Site") and evaluated the associated LUST Case (the Case) in accordance with the State Water Resources Control Board's (State Water Board's) Low Threat Underground Storage Tank Case Closure Policy (LTCP). ACDEH's evaluation included, but was not limited to, the review of the following document(s):

1. *Site Investigation Report* dated July 28, 2017 (the "Investigation Report") prepared by Wheeler Group Environmental, LLC (Wheeler Group) on behalf of Mercedes-Benz of Oakland/Euro Motors Oakland, Inc and submitted to ACDEH as requested in ACDEH's directive letter dated April 17, 2017. ACDEH has determined that the Case does not meet the LTCP closure criteria indicated in Table 1 below:

	General Criteria			Media Specific Criteria				
	a. Public Water	V	e. CSM	V	1. Groundwater			
Ø	b. Petroleum Only		f. Secondary Source	\square	2. Petroleum Vapor Intrusion to Indoor Air			
	c. Release Stopped		g. MTBE		3. Direct Contact and Outdoor Air Exposure			
	d. Free Product		h. Nuisance					

Table 1 - Unsatisfied LTCP Closure Criteria

An LTCP criteria evaluation checklist is provided in **Attachment A**. Specific details pertaining to ACDEHs evaluation of the LTCP closure criteria indicated above that are not met at this time are provided in **Section I** of this letter. ACDEH's identification of environmental conditions unrelated to case closure under the LTCP are provided in **Section II**. An evaluation of the case's GeoTracker compliance is included in **Section III**. Deliverables and technical reports requested to address unsatisfied LTCP closure criteria or other impediments to regulatory case closure are summarized in **Section IV**.

I. <u>UNSATISFIED LTCP CLOSURE CRITERIA EVALUATION</u>

The following unsatisfied LTCP closure criteria were identified during ACDEH's review of the case file. Excerpts from the LTCP are included in *grey italics*.

General Criteria

b. The unauthorized release consists only of petroleum

"...For the purposes of this policy, petroleum is defined as crude oil, or any fraction thereof...including the following substances: motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils, including any additives and blending agents such as oxygenates contained in the formulation of the substances."

ACDEH's review of the case files indicates that non-petroleum contaminants have been detected in environmental media at the Site. Specifically, chlorobenzene and chlorinated ethenes were identified in groundwater, soil, and soil vapore samples at the Site. Chlorobenzene is commonly utilized as cleaning and degreasing agents to remove water insoluble debris or scaling from metal, plastic, and fiberglass. Chlorobenzene is also a precursor (and impurity) in the production of dichlorobenzene which is a major component in common automobile engine and carburetor cleaners¹. Chlorinated ethenes are common in cleaning solvents and degreasers.

This Site is currently regulated as a LUST case, which is applicable only to unauthorized releases of petroleum hydrocarbon and related fuel constituents from underground storage tanks. The Investigation Report identifies historic on-site operations (i.e. automotive service garage) and infrastructure (i.e. hydraulic lifts) which may be associated with the identified non-petroluem contaminants. An evaluation to determine the source(s) of non-petroleum contaminants identified has not been completed at this time. In order for the Case to continue to be regulated as a LUST case or closed under the LTCP, ACDEH requires that evidence be provided that non-petroleum contaminants are from a source other than the unauthorized release associated with the Case.

e. A conceptual site model (CSM) that assesses the nature, extent, and mobility of the release has been developed

"The CSM establishes the source and attributes of the unauthorized release, describes all affected media (including soil, groundwater, and soil vapor as appropriate), describes local geology, hydrogeology and other physical site

¹ United States Environmental Protection Agency, Locating and Estimating Air Emissions from Sources of Chlorobenzenes (Revised). March 1994.

characteristics that affect contaminant environmental transport and fate, and identifies all confirmed and potential contaminant receptors (including water supply wells, surface water bodies, structures and their inhabitants). ...All relevant site characteristics identified by the CSM shall be assessed and supported by data so that the nature, extent and mobility of the release have been established to determine conformance with applicable criteria in this policy."

ACDEH's review of the case files indicates that data gaps relative to the completeness of the CSM are present with respect to the evaluation of the Media Specific Criteria for Groundwater and Petroleum Vapor Intrusion to Indoor Air which are discussed in *Section I.1* and *Section I.2* respectively. In addition, ACDEH identified the following data gaps that must be addressed for the CSM to be considered sufficiently complete:

- <u>Identification of Property Boundaries</u> The Site is identified as portion of an irregular-shaped facility consisting of four parcels. A site plan depicting on-site structures and some infrastructure was provided in the Investigation Report, however, parcel lines and identification were omitted from the site plan. Due to the proximity of other potential sources of petroleum and non-petroleum contamination at the Site, ACDEH requires that parcel lines be depicted on the Site Plan to aid in the planning and implementation of additional investigative activities.
- 2. European Motors LTD LUST Cleanup Site (the "European Motors Site") The European Motors Site is a LUST Cleanup Site associated with the removal of three USTs and associated pumps and piping. The location of one of the tanks (the 4,000 gallon UST) and its associated fuel pump location are depicted on the Site Map provided in the Investigation Report, however, the location of the remaining two UST systems (reportedly a 1,000 gallon diesel UST and a 550 gallon gasoline tank) are not depicted. Furthermore, historic monitoring wells associated with the site characterization efforts conducted as part of the European Motors Site, the European Motors Site, and the Alameda County Assessor's Office parcel maps, the 1,000 gallon diesel UST and the 550 gallon gasoline UST associated with the European Motors Site are located on-site or in the immediate vicinity of the Site. ACDEH requires that the locations of these relevant features be included and that the proximity of these UST system components to the Site be evaluated as part of the development of the CSM.
- 3. <u>Waste Management Practice:</u> Current and historic operations at the site characteristically generate waste oil. Storage and disposal practices for waste oil at the Site and associated infrastructure is unknown. Infrastructure commonly associated with on-site operations include floor drains, phase separators, underground or above ground waste oil tanks, and waste storage. Motor oil range total petroleum hydrocarbons and non-petroleum constituents commonly associated with contamination from operations at automotive service stations were identified in soil, groundwater, and/or soil vapor at the Site. ACDEH requires that infrastructure and known practices associated with the storage, handling, and disposal of waste oil or other waste fluids be evaluated to determine if there are other potential sources for non-petroleum releases other than the unauthorized release associated with the Case.

Media Specific Criteria

1. Groundwater

"If groundwater with a designated beneficial use is affected by an unauthorized release, to satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites listed [in the policy and summarized in Table 2 below]. A plume that is "stable or decreasing" is a contaminant mass that has expanded to its maximum extent: the distance from the release where attenuation exceeds migration.

...Sites with soil that does not contain sufficient mobile constituents...to cause groundwater to exceed the groundwater criteria in this policy shall be considered low-threat sites for the groundwater medium."

ACDEH's review of the case file indicate that insufficient evidence has been presented to support the determination that the contaminant plume that exceeds water quality objectives (the "Groundwater Plume") is stable or decreasing in areal extent. Please note that the extents of the Groundwater Plume are defined by the water quality objectives and not by the LTCP closure criteria. The extents of the Groundwater Plume are not defined to the north beyond boring B1, to the southeast beyond boring B3 or B6, or the east beyond boring B4. Therefore, the stability of the Groundwater Plume cannot be evaluated at this time.

Additionally, ACDED has determined that until the extents and stability of the Groundwater Plume are defined, the maximum plume length cannot be calculated. As such, the site does not meet any of the Groundwater Site Classes summarized in the table below:

	Groundwater Site Class					
Table 2 - Summary of Groundwater Site Class Requirements	(1)	(2)	(3)	(4)	(5)	
Maximum allowable plume Length (feet)	100	250	250	1,000	-	
Free Product not present [N] or removed to extent practicable ^A [R]	N	N	R	N	-	
Minimum required distance to nearest existing water supply well or surface water body (feet)	250	1,000	1,000	1,000	-	
Maximum allowable benzene concentration in Groundwater (μ g/L)	-	3,000	-	1,000	-	
Maximum allowable MTBE concentration in groundwater (μ g/L)	-	1,000	-	1,000	-	
Potential land use restriction as a condition of closure	-	-	Yes	-	-	
Regulatory determination that contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved in a reasonable timeframe	-	-	-	-	Yes	

"-" = criteria not applicable to site class; "μg/L" = micrograms of analyte per liter of sample; ^A = Free product may still be present below the site where the release originated, but does not extend off-site.

2. Vapor Intrusion to Indoor Air

"Petroleum releases shall satisfy the media-specific criteria for petroleum vapor intrusion to indoor air and be considered low-threat for vapor-intrusion-to-indoor-air pathway if:

- a. Site-specific conditions at the release site satisfy all of the characteristics and criteria of scenarios 1 through 3 as applicable, or all the characteristics and criteria of scenario 4 as applicable [These scenarios are summarized in Table 3 below]; or
- b. A site-specific risk assessment for vapor intrusion pathway is conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency; or
- c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, the regulatory agency determines that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health.

...satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk."

Direct measurement of soil vapor was attempted at location B4 at a depth of 5.5 feet below ground surface, however, no-flow conditions were encountered which prevented collection of soil vapor samples following standard methods (United States Environmental Protection Agency [USEPA] method TO-15). A soil vapor sample was collected

from this location using US EPA method TO-17 and reported concentrations of benzene, ethylebenzene, and naphthalene were $2.4 \,\mu\text{g/m}^3$, $1.0 \,\mu\text{g/m}^3$, and $2.5 \,\mu\text{g/m}^3$ respectively, however, it is unclear at this time if these data are representative or defensible. Oxygen and leak check compound data could not be collected due to low flow conditions within the vapor probe.

Total petroleum hydrocarbons (calculated as the sum of gasoline and diesel range hydrocarbons) is below the 100 milligram of analyte per kilogram of sample (mg/kg) threshold in all samples except for at location B-4 at depths of 3 to 6.5 feet below ground surface. Groundwater at the site is reportedly encountered between 6 and 7 feet below finished grade. The maximum benzene concentration that has been reported in groundwater at the Site is 15 micrograms of analyte per liter of sample (μ g/L) which was reported in groundwater at sample location B3. The criteria for each of the LTCP petroleum vapor intrusion to indoor air Exposure Scenarios is summarized in Table 3 below:

Table 3 - Petroleum Vapor Intrusion to Indoor Air	Exposure Scenario										
Exposure Scenario	1	2		3		4					
Characteristics and Criteria			а	b	с	а	b	с	d		
Bounds of BAZ	BoF to LNAPL in GW	BoF to LNAPL in Soil	BoF to Max GW				-	BOF to 5' below BoF	GS to 5' below GS		
Minimum BAZ Thickness	30'	30′	5′	10′	5′		-	5	ć		
TPH in BAZ Threshold (mg/kg)	<100	<100		<100 - <100		00					
Benzene in GW Threshold (µg/L)	-	-	<100	<u>></u> 100 and <1,000	<1,000						
Soil Gas Sample Depth	-	-		-		5' below BoF	5' below GS	5′ below BoF	5′ below GS		
Oxygen in BAZ	-	-	Unk or Unk or <4% <4% ≥4%				-	<u>></u> 4	%		
Benzene in soil gas of RES BAZ COM	-	-		-		<85	<280	<85,000	<280,000		
Ethylebenzene in soil RES gas of BAZ COM	-	-	-			<1,100	<3,600	<1,100,00	0 3,600,000		
Napthalene in soil gas of RES BAZ COM	-	-		-		<93	<310	<93,000	<310,000		

"-": Criteria not applicable to exposure scenario; "BAZ": Bioattenuation Zone; "BoF": Base of Foundation; "LNAPL": unweathered light nonaqueous phase liquid; "Max GW": maximum recorded historic groundwater elevation; " ' ": feet; "GS": existing ground surface; "TPH": sum of gasoline range and diesel range total petroleum hydrocarbons; "mg/kg": miligrams of analyze per kilograms of sample; "μg/L": micrograms of analyte per liter of sample; "Unk": Unknown; "RES": residential; "COM": commercial;

ACDEH's review of the case file indicates that insufficient evidence has been presented to support the determination that **Media Specific Criteria a., b., or c. for Petroleum Vapor Intrusion to Indoor Air** listed above have been satisfied, specifically:

- a. A determination that the Site meets any of the LTCP Exposure Scenarios cannot be made at this time because:
 - (i) TPH has been reported above the applicable threshold concentration of 100 mg/kg in soil between 3 feet and 6 feet below ground surface at sample location B4; and

- (ii) The areal extents of the groundwater plume that exceeds groundwater quality objectives is unknown and sub-grade building components (i.e. basements) are known to be present in the proximity of the Site. Until the areal extents of the groundwater plume is known, the bioattenuation zone and vertical separation distance from the base of the foundations to contaminated groundwater cannot be determined.
- b. A site specific risk assessment has not been completed for the Site at this time; or
- c. Engineering controls to mitigation vapor intrusion are not currently installed or employed at the Site.

II. ENVIRONMENTAL CONDITIONS NOT ASSOCIATED WITH THE LTCP

As discussed in *Section I.b*, non-LUST case associated constituents of concern have been identified in soil, groundwater, and soil vapor at the Site. ACDEH has also identified historic land uses at the Site associated with the identified non-LUST constituents. Therefore, ACDEH will be opening a separate SCP case for the oversight of investigation and characterization associated with these non-LUST constituents. Non-LUST constituents identified by ACDEH are summarized below:

1. Non-petroleum Constituents (Chlorobenzenes) in Soil, Groundwater, and Soil Vapor

Chlorobenzene was identified in soil samples collected from the excavation and over-excavation of the UST system and soil boring B1 through B4. A maximum concentration of chlorobenzene of 3.64 milligrams of analyte per kilogram of sample (mg/kg) was reported within the extents of the excavation for the removal of the UST system in September 2013. The San Francisco Bay Regional Water Quality Control Board's Environmental Screening Levels (ESL) dated February 22, 2016 establish a Tier 1 ESL for chlorobenzene of 1.5 mg/kg on the basis of leaching to groundwater. The vertical and lateral extents chlorobenzene in soil above the Tier 1 ESL are bound by the current data set except along the eastern most bound of the data set (Soil boring B4-SQ).

Chlorobenezene was identified as present in groundwater samples collected from soil borings B1 through B6 at a maximum concentration of 4,900 micro-grams of analyte per liter of sample (μ g/L) in the groundwater sample collected from soil boring B4, which is co-located with the maximum detection of chlorobenzene in soil (B4-SG). This concentration exceeds the ESLs for direct exposure human health risk levels (70 μ g/L), the aquatic habitat goal levels for fresh water and saltwater ecotoxicity (25 and 65 μ g/L respectively) and the odor nuisance levels for both drinking and non-drinking water (50 and 500 μ g/L respectively). Chlorobenzene was not present above the laboratory reporting limit of 0.16 μ g/L in the grab sample collected from the standing water of the cross-gradient basement at the adjacent 2901 Broadway property.

Chlorobenzene was not reported as present in the soil vapor samples collected from boring B4-SG, however, polychlorobenzene species were reported as present. As identified in *Section I.b*, chlorobenzene is a precursor and degradant of polychlorobenzenes.

The extents of the chlorobenzene groundwater plume, soil impacts, and soil vapor are not bound by the current analytical data set. Additionally, a CSM that evaluates the fate and transport of chlorobenzene and that evaluates exposure pathways and receptors for chlorobenzene has not been completed.

2. Non-petroleum constituents (Chlorinate Ethenes) in Soil, Groundwater, and Soil Vapor

Cis-1,2-DCE was reported as present in only one sampling location (B3-GW) at a concentration of 7.8 μ g/L which exceeds the direct exposure human health risk ESL of 6.0 μ g/L, but is below all other applicable ESLs. Parent products Tetrachloroethene (PCE) and Trichloroethene (TCE) were not reported as present in any of the six groundwater samples collected above their respective laboratory reporting limits which ranged from 0.15 μ g/L to 2.5 μ g/L. Similarly, daughter product vinyl chloride (VC) was not reported as present in any of the groundwater samples collected, however, the laboratory reporting limit for vinyl chloride exceeded the applicable groundwater ESL of

 $0.061 \mu g/L$ and therefore cannot be fully evaluated. Groundwater samples to evaluate the presence of DCE or other chlorinate ethenes PCE, TCE or VC to the east or west of B3 have not been collected.

Chlorinated ethenes PCE and TCE were reported as present above the laboratory reporting limit in the soil vapor sample collected from the soil vapor probe B4-SG at concentrations of 0.89 micro-grams of analyte per cubic meter of sample (μ g/m³) and 0.52 μ g/m³ respectively. Although the concentrations of chlorinated ethenes are below the applicable Tier 1 ESLs, soil vapor analytical data at the site is limited to a single sample. As such spatial extents and variability and the temporal stability of chlorinated ethenes in soil vapor cannot be evaluated at this time.

Based on the available data set, there is insufficient data to determine that (a) there is not an on-site source of chlorinated ethene contamination; (b) There is not a groundwater plume that exceeds water quality objectives for chlorinated ethenes present beneath the Site; and (c) there is not a soil vapor plume of chlorinated ethenes at the Site that presents an unacceptable risk to human health or the environment.

III. <u>GEOTRACKER COMPLIANCE</u>

ACDEH's review of the case file included a GeoTracker compliance audit. GeoTracker reporting requirements are described in Section 3893 of the California Code of Regulations. Non-compliant GeoTracker requirements identified as part of ACDEH's compliance audit are identified in the table below.

Table 4 – Non-compliant GeoTracker Requirements								
	Latitude and longitude of wells (GEO_XY)		Depth and length of screened interval of wells (Field Point ID)					
	Surveyed elevation of wells (GEO_Z)		Boring log (GEO_BORE)					
	Elevation of groundwater in wells (GEO_WELL)		Technical report (GEO_REPORT)					
	Site map(s) depicting location of <u>all</u> sampling points (GE	0_MA	P)					

IV. <u>DELIVERABLE AND TECHNICAL REPORT REQUEST(S)</u>

Please submit the following technical reports and deliverables to ACDEH (Attention: Jonathan Sanders) in accordance with the compliance dates provided below and the *Responsible Party(ies) Legal Requirements/Obligations* and the *File Names for Electronic Reports* which are included as **Attachment B** and **Attachment C** respectively. These technical reports are being requested pursuant to Section 25296.10 of the California Health and Safety Code and Article 11, Chapter 16, Division 3 of Title 23 of the California Code of Regulations. Failure to comply with the deliverable and technical report request compliance dates listed below could result in enforcement action(s) as described in Attachment B.

1. Data Gap Evaluation, Work Plan, & Updated Site Conceptual Model Compliance Date: September 19, 2018

Please prepare a work plan to address the data gaps identified in ACDEH's Unsatisfied LTCP Closure Criteria Evaluation. The Subsurface Investigation Work Plan must be prepared in general accordance with the State Water Boards *Leaking Underground Fuel Tank Guidance Manual* (the LUFT Manual) and must contain the following elements:

a. A CSM reflecting current site conditions and identifying data gaps that must be addressed to satisfy LTCP closure criteria. The updated CSM must either provide technical justification and supporting evidence to address the data gaps identified in *Section I.b* and *Section I.e* or must identify these data gaps as impediments to closure under the LTCP. ACDEH recommends that the CSM be prepared using ACDEH's

tabular format. A template for the preparation of a CSM following this tabular format is available on request.

- b. A description of the Scope of Work (SOW) with technical justification for monitoring well and/or sample location selection that is supported by the CSM to address data gaps identified in the CSM as impediments to closure under the LTCP. If a dynamic work plan is used, decision criteria should be identified and described; The scope of work must include:
 - i. Evaluation and/or collection of additional lines of evidence to determine if non-petroleum constituents identified at the Site are associated with the unauthorized release or from other sources;
 - ii. Collection of additional lines of evidence to evaluate the lateral extents, stability, and maximum length of the Groundwater Plume;
 - Collection of additional lines of evidence to support to evaluate the lateral and vertical extents of soil contamination in the vicinity of boring B4 that exceeds the 100 mg/kg threshold for TPH in a bioattenuation zone required in each of the LTCP Exposure Scenarios for petroleum vapor intrusion;
 - iv. Collection of additional lines of evidence to evaluate the vapor intrusion risk at the Site. This should include (1) evaluation of the lateral and vertical extents of soil contamination in the vicinity of boring B4 that exceeds the 100 mg/kg threshold for TPH in a bioattenuation zone; and (2) collection of additional soil vapor data to support evaluation under LTCP Exposure Scenario 4;
- c. A sampling and analysis plan, including identification of DQOs, analytical methods, sampling methods, sampling intervals and criteria, and quality control and quality assurance measures; Sampling methods must reference an Standard Operating Procedure which must be included as an appendix; and
- d. A description of reporting requirements.

2. Stakeholders Meeting Compliance Date: September 19, 2018

Please schedule a stakeholders meeting to discuss the non-petroleum constituents identified at the site and the opening of a separate SCP case for the characterization of the non-petroleum constituents discussed in *Section II*. This meeting must be held by the compliance data listed above.

V. <u>CLOSING</u>

ACDEH looks forward to continuing to work with you and your consultants to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please contact the primary caseworker, Jonathan Sanders who can be reached by phone at (510)567-6791 or by email at jonathan.sanders@acgov.org.

Sincerely,

Dilan Roe, P.E. C73703 Chief Land & Water Division



Jonathan Sanders Senior Hazardous Materials Specialist Local Oversight and Site Cleanup Program

ENCLOSURES:

- Attachment A LTCP Closure Criteria Evaluation Checklist
- Attachment B Responsible Party(ies) Legal Requirements / Obligations
- Attachment C File Names for Electronic Reports

DISTRIBUTION LIST:

Electronic File, GeoTracker

Dilan Roe, ACDEH, Chief Land, Water Division (Sent via E-mail to: dilan.roe@acgov.org)

Jonathan Sanders, ACDEH, Senior Hazardous Materials Specialist (Sent via E-mail to: jonathan.sanders@acgov.org)

Brent Wheeler, Wheeler Group, (sent via E-mail to: bwheeler@wheelergroupenvironmental.com)

ATTACHMENT A

LTCP Closure Criteria Evaluation Checklist

G EO T RACKER	🌣 Regulator T	ools	ဲ Reports	🌣 Other Tools	SAMA 👬						🖂 Contact	€ Logout	Qui	ick Se
MERCEDES BE	NZ OF OAKLANI) (T1000	0009111) - <u>м</u> а	P THIS SITE										
340 29TH STR OAKLAND , CA ALAMEDA COU LUST CLEANUP SI STATUS: OPEN - A	EET 94609-3401 JNTY TE <u>(INFO)</u>				ALA	MEDA CO	T <mark>ERSIGHT AG</mark> UNTY LOP (L SCO BAY RWC	EAD) - C		3220 - <u>JONATH</u>	<u>HAN E. SANDERS</u> -	<u>DILAN ROE</u>		
I∎ Activities F	Report 🗗 Doo	cuments	/ Data	Environmental Conditi	ions 🛛 🗱 Adr	min	🖸 Fundi	ng	🎟 Case I	Reviews				
			J	THIS PROJECT WAS LA	ST MODIFIED BY <u>JOI</u>	NATHAN E	E. SANDERS O	ON 6/19/2	2018 11:28:27	AM - <u>HISTOR'</u>				
CLOSURE POL	ICY		THIS V	ERSION IS FINAL AS	S OF 6/19/201	18			CHECKLIS	T INITIATED C	ON 6/30/2017		CLO	OSURE
General Crite	ria - The site sati	sfies the p	oolicy general o	Criteria - CLEAR SECTION ANS	WERS									NO
Name of W	horized release loc ater System : y Municipal Util			ea of a public water system	?									
b. The unautho	orized release cons	sists only c	of petroleum <u>(in</u>	<u>fo)</u> .										
Contamina		nzene	РСЕ 🔲 ТСЕ	Chloroform Vinyl C	hloride 🔲 Bromo	form]		
	Other:													
c. The unautho	orized ("primary") r	elease fror	m the UST syste	em has been stopped.										
·	t has been remove			•								FP No	t Encount	.ered
	al site model that a (Check all that App		he nature, exten	t, and mobility of the releas	e has been develoj	oed <u>(info</u>	<u>)</u> .]			
GW N	lot Evaluated													
		-		f Contamination Not Defined amination Not Defined										
Hydro	ogeology Not Adequ	ately Define												
	ntial Receptors Not I		Extent Not Define	d										
Soil A	Assessment Incompl													
Soil V	/apor Not Evaluated													
Soil vapo		not be co	mpleted until	areal extent of groundwat	er plume is known	n due to	the presen	ce of n	earby sub-g	ade				
	componentes.													
	ource has been rer													
11				ts reported in accordance v	vith Health and Saf	ety Code	Section 252	296.15.					Not Req	luired
	ance exist, as defir													
	cific Criteria: Gro e classes of sites			inant plume that exceeds	water quality ob	jectives	is stable or	⁻ decrea	ising in area	l extent, an	d meets all of t	he additional c	haracteri	stics o
EXEMPTION -	Soil Only Case (Re	elease has	not Affected G	roundwater - <u>Info</u>)										
	neet any of the Gr		-											
	UESTIONS - Plea: h (That Exceeds V			iditions that do not meet th	e policy criteria:									
				00 Feet	Unknown									
No	ble or Decreasing Unknown	in <u>AREAL</u>	Extent :											
	in Groundwater :													
	No Unknowi Has Been Remov		Maximum Exten	t Practicable :										
No O														
○ No ○	Unknown			or Decreasing for 5-Years (i	·									
For sites with	• •	ner Willing	y to Accept a La	nd Use Restriction (if requi	red) :									
	Extends Offsite :													
	Ves Unknown Benzene Concentration :													
	μg/l and < 3,000 μ	g/l	3,000 µg/l 🛛 🔘	Unknown										
MTBE Conce	entration : µg/l Unknowr	ı												
Nearest Sup	ply Well (From Plu	me Bound												
	● ≤ 250 Feet ● > 250 Feet and ≤ 1,000 Feet ● Unknown Nearest Surface Water Body (From Plume Boundary) :													
	eet > 250 Fee			known										
2. Media Spec		roleum Va	apor Intrusion	to Indoor Air - The site is	considered low-t	hreat fo	r the vapor-	intrusic	on-to-air pat	hway if site	-specific condit	tions satisfy ite	ems 2a, 2l	b, or 2

EXEMPTION - Active Commercial Petroleum Fueling Facility

Does the site meet any of the Petroleum Vapor Intrusion to Indoor Air specific criteria scenarios?

Does the site meet any of the Petroleum Vapor Intrusion to Indo	
ADDITIONAL QUESTIONS - Please indicate only those condition Soil Gas Samples :	ns that do not meet the policy criteria:
No Soil Gas Samples	
Exposure Type :	
Residential Commercial	
Free Product :	
🔍 In Groundwater 🛛 In Soil 🔍 Unknown	
TPH in the Bioattenuation Zone :	
	at two depths within 5 ft. zone (only for Scenario 4 with BioZone)
Bioattenuation Zone Thickness :	
	10 Feet and < 30 Feet \bigcirc ≥ 30 Feet \bigcirc 30ft BioZone Compromised TPH > 100mg/kg \bigcirc Unknown
O2 Data in Bioattenuation Zone :	
• No O ₂ Data $O_2 < 4\%$ $O_2 \ge 4\%$	
Benzene in Groundwater :	
\bigcirc ≥ 100 µg/l and < 1,000 µg/l \bigcirc ≥ 1,000 µg/l \bigcirc Unknow	vn
Soil Gas Benzene : ≥ 85 μg/m³ and < 280 μg/m³	000 µg/m ³ ≥ 85,000 µg/m ³ and < 280,000 µg/m ³ ≥ 280,000 µg/m ³ Unknown
Soil Gas EthylBenzene :	
\bigcirc ≥ 1,100 µg/m ³ and < 3,600 µg/m ³ \bigcirc ≥ 3,600 µg/m ³ and	d < 1,100,000 µg/m ³ \bigcirc ≥ 1,100,000 µg/m ³ and < 3,600,000 µg/m ³ \bigcirc ≥ 3,600,000 µg/m ³ \bigcirc Unknown
Soil Gas Naphthalene :	
$\bigcirc \ge 93 \ \mu g/m^3 \text{ and } < 310 \ \mu g/m^3 \bigcirc \ge 310 \ \mu g/m^3 \text{ and } < 93,0$	000 μg/m ³ \bigcirc ≥ 93,000 μg/m ³ and < 310,000 μg/m ³ \bigcirc ≥ 310,000 μg/m ³ \bigcirc Unknown
3. Media Specific Criteria: Direct Contact and Outdoor Air I	Exposure - The site is considered low-threat for direct contact and outdoor air exposure if it meets 1, 2, or 3 below CLEAR SECTION
EXEMPTION - The upper 10 feet of soil is free of petroleum cor	ntamination
Does the site meet any of the Direct Contact and Outdoor Air Ex	xposure criteria scenarios?
3(a) - Maximum concentrations of petroleum constituents in soi	il are less than or equal to those listed in the following table (<u>LINK)</u> for the specified depth below ground surface.
Additional Information	
Should this case be closed in spite of NOT meeting policy criteri	ia?
Has this LTCP Checklist been updated for FY 17/18?	
	SPELL CHECK

Save Form as Partially Completed Save Form as Complete

ATTACHMENT B

Responsible Party(ies) Legal Requirements / Obligations

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: December 14, 2017				
	ISSUE DATE: July 25, 2012				
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016				
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations				

REPORT & DELIVERABLE REQUESTS

Alameda County Department of Environmental Health (ACDEH) Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of all reports in electronic form to the State Water Board's (SWB) GeoTracker website in accordance with California Code of Regulations, Chapter 30, Division3, Title 23 and Division 3, Title 27.

Leaking Underground Fuel Tank (LUFT) Cases

Reports and deliverable requests are 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 (RP) in conjunction with an unauthorized release from a petroleum underground storage tank (UST) system.

Site Cleanup Program (SCP) Cases

For non-petroleum UST cases, reports and deliverables requests are pursuant to California Health and Safety Code Section 101480.

ELECTRONIC SUBMITTAL OF REPORTS

A complete report submittal includes the PDF report and all associated electronic data files, including but not limited to GEO_MAP, GEO_XY, GEO_Z, GEO_BORE, GEO_WELL, and laboratory analytical data in Electronic Deliverable Format[™] (EDF). Additional information on these requirements is available on the State Water Board's website (<u>http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/</u>)

- Do not upload draft reports to GeoTracker
- Rotate each page in the PDF document in the direction that will make it easiest to read on a computer monitor.

GEOTRACKER UPLOAD CERTIFICATION

Each report submittal is to include a GeoTracker Upload Summary Table with GeoTracker valid values¹ as illustrated in the example below to facilitate ACDEH review and verify compliance with GeoTracker requirements.

GeoTracker Upload Table Example

Report Title	Sampl e Period	PDF Report	GEO_ MAPS	Sample ID	Matrix	GEO _Z	GEO _XY	GEO_ BORE	GEO_WEL L	EDF
2016 Subsurface Investigation Report	2016 S1	~	•	Effluent	SO					✓
2012 Site Assessment Work Plan	2012	~	~							
2010 GW Investigation	2008 Q4	✓	✓	SB-10	W	~				~
Report				SB-10-6	SO					✓
				MW-1	WG	~	~	✓	✓	✓
				SW-1	W	✓	✓	✓	✓	✓

¹ GeoTracker Survey XYZ, Well Data, and Site Map Guidelines & Restrictions, CA State Water Resources Control Board, April 2005

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: NA				
	ISSUE DATE: December 14, 2017				
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016				
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations				

ACKNOWLEDGEMENT STATEMENT

All work plans, technical reports, or technical documents submitted to ACDEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to the State Water Board's GeoTracker website." This letter must be signed by the Responsible Party, or legally authorized representative of the Responsible Party.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6731, 6735, and 7835) 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 licensed or certified professional and include the professional registration stamp, signature, and statement of professional certification. Additional information is available on the Board of Professional Engineers, Land Surveyors, and Geologists website at: http://www.bpelsg.ca.gov/laws/index.shtml.

UNDERGROUND STORAGE TANK CLEANUP FUND

For LUFT cases, RP's non-compliance with these regulations may result in ineligibility to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse the cost of cleanup. Additional information is available on the internet at: https://www.waterboards.ca.gov/water_issues/programs/ustcf/

AGENCY OVERSIGHT

Significant delays in conducting site assessment/cleanup or report submittals may result in referral of the case to the Regional Water 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.

ATTACHMENT C

File Names for Electronic Reports

	REVISION DATE: April 4, 2018				
Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	PREVIOUS REVISIONS: April 4, 2018, July 17, 2017, November 8, 2016, December 15, 2015, December 16, 2014, June 19, 2013, June 15, 2011, March 26, 2009, April 29,				
	2008 ISSUE DATE: June 16, 2006				
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: File Names for Electronic Reports				
Format: REPORT_NAME_R_YYYY-MM-DD					
Ex: SWI R VOL1 2006-05-25					

LOP and SCP (VRAP) INCOMING REPORTS AND LETTERS				
Document Name	Abbreviation File Name= Abbreviation + Date (yyyy- mm-dd)			
Abandoned Well Information/Water Supply Well Information	ABWELLINF_R			
Addendum	ADEND_R (added after report name)			
Additional Information Report	ADD_R			
Analytical Reports (Loose data sheets not in report)	ANALYT_R			
As Built Drawings (or Plans)	AS_BUILT			
Case File Scanned By OFD	CASE_FILE			
Cleanup and Abatement Report	CAO_R			
Case Transfer Form (from CUPA)	CASE_TRNSFR_F			
Conduit Study/Well Search/Sensitive Receptor/Well Survey/Preferential Pathway Study	COND_WELL_R			
Corrective Action Plan (CAP)	CAP_R			
Correspondence	CORRES_L			
Court Injunctions	INJ_L			
Development Entitlement	DEV_ENTITLE			
Development Plans (Includes Plan Set, Cross-sections, and Related Drawings)	DEV_PLAN			
Development Schedule (Project Schedule, Gant Chart, etc.)	DEV_SCHD			
DWR Confidential Well Logs (Report containing)	report name_R_CONFIDENTIAL_YYYY- MM-DD (Ex: SWI_R_CONFIDENTIAL_YYYY-MM-DD)			
DWR Well Completion Report-Confidential (Loose well logs)	DWR_WELL_CONFIDENTIAL_YYYY- MM-DD (Date of Well Log)			
ESI/DAR (Environmental Site Investigation, Data Assessment Report	ESI_R			
Excavation Report	EX_R			
Extension Request Letter	EXT_RQ_L			

Fact Sheet	FACT_SHT
Feasibility Study	FEASSTUD_R
Groundwater Monitoring/Quarterly Summary Report	GWM_R
Financial Assurance/Letter of Credit	FNCL_ASSRNC_LOC
Interim Remedial Action Plan	IRAP_R
Interim Remediation Results (Includes Pilot Test Reports, Vapor Mitigation Reports, Soil Management Reports, Free Product Removal Reports, & Dual-Phase Extraction Reports)	IR_R
Lawsuit	LAWSUIT_R
Migration Control Report	 MIG_R
Miscellaneous Report/Soil Sample	MISC_R
Miscellaneous Sample Report (analytical results)	MISC_SAMP_R
Notification Letter	NOT_L
NPDES Miscellaneous Reports	NPDES_R
Operations & Maintenance Plan	OM_P
Operations & Maintenance Report	OM_R
Pay for Performance	PFP_R
Petition	PETITION_R
Phase 1 Environmental Assessment Report	PHASE1_R
Photos	РНОТО
Preliminary Site Assessment Report/Phase 2 (historic reports only)	PSA_R
Remedial Action Plan	RAP_R
Remedial Design & Implementation Plan	RDIP_R
Remediation Progress Report	REM_R
Request for Closure	RFC(_L or _R)
Risk Assessment Report	RISK_R
Risk Based Corrective Action	RBCA_R
List of Landowners Forms	LNDOWNR_F
SB2004 Letter of Commitment	LOC_L
Site Conceptual Model/Conceptual Site Model	SCM_R
Site Health & Safety Plan	SFTY_PLAN_R
Site Management	SITE_MANAGE_R_
Acknowledgement Statement for Site Management Plan	SMP_ACK_L
Site Management Plan	SMP_R
Site Summary Report	SITE_SUM_R

Soil and Water Investigation Report (Includes soil gas/vapor reports, indoor, additional site investigation, well installation, site characterization, cross section, indoor air, additional onsite investigation, Phase II/preliminary site assessment)	SWI_R
Soil Disposal Report	SOIL_DSPL_R
Source Area Characterization	SOURCAREA_R
State Information	STATE_INFO (no date)
Status Report(monthly remediation status reports addressed to sanitary district requires no stamp/perjury letter)	STAT_R
Tank/Tank System Removal Report	TNK_R
Tentative Order Report	TENT_R
Unauthorized Release Form	URF_R
UST Sampling Report	UST_SAMP_R
USTCF 5 Year Review	USTCF_5YR
USTCF issued Public Notice	USTCF_PP_L
Well Construction Report (limited to water supply wells)	WELL_CST_R
Well Decommissioning Report/Letter (well destruction/abandonment)	WELL_DCM_R
Work Plan	WP_R