ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
COLLEEN CHAWLA, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

April 4, 2018

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon CA**,** 94583
Attention: James Kiernan
(*Sent via electronic mail to:*
jkiernan@chevron.com)

United Brothers Enterprise Inc.
2501 North Main Street
Walnut Creek, CA**,** 94597
Attention: DeLong Liu
(*Sent via electronic mail to:*
delongisi@yahoo.com)

ConocoPhillips
76 Broadway
Sacramento, CA 95818
Attention: Bill Borgh
(*Sent via electronic mail to:*
bill.borgh@conocophillips.com)

Scarteen Corp
PO Box 7600
Los Angeles, CA**,** 90051

Subject: **Meeting Follow Up**
Case No. RO0000253
GeoTracker Global ID T0600101467
Unocal #5781
3535 Pierson Street, Oakland, CA 94619

Dear Mr. Kiernan:

Thank you and Katherine Szymanowski of Arcadis U.S., Inc. (Arcadis) for participating in the meeting with Alameda County Department of Environmental Health (ACDEH) staff on March 5, 2018 at our offices. The purpose of the meeting was to discuss the conclusions and recommendations presented in the document entitled *Semi-Annual Status Report and Low Threat Closure Review* (RFC) dated December 21, 2017 and prepared by Arcadis which was submitted to ACDEH on behalf of Chevron Environmental Management Company.

As discussed in the meeting, ACDEH has approved a suspension of groundwater monitoring at the subject site pending our review of the items requested below in conjunction with the State Water Board's (SWBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP). A determination on the resumption of monitoring will be made following our next meeting, tentatively scheduled for June 5, 2018.

As presented in the RFC, Arcadis expresses the opinion the site meets the LTCP low-threat closure criteria, and thereby requests ACDEH grant low-threat closure. Arcadis states site conditions meet the LTCP general and media-specific criteria, hence satisfying the case closure requirements of Health and Safety Code Section 25296.10, and that analytical data presented support a conclusion that residual concentrations of COCs in soil and groundwater at the site are not expected to pose a significant threat to human health or the environment.

Technical Comments

1. **Site Conceptual Model:** Based on ACDEH's review of the case file and the RFC, we are of the opinion the case does not meet the LTCP General Criteria e (Site Conceptual Model) and the Media Specific-

Groundwater criteria. According to the LTCP, the SCM is a fundamental element of a comprehensive site investigation. The SCM 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 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). The SCM is relied upon by practitioners as a guide for investigative design and data collection. All relevant site characteristics identified by the SCM 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.

Our review of the case files indicates that data collection and analysis has not been sufficient to assess the geology and hydrology affecting groundwater flow at the site. Specifically groundwater flow appears to be poorly understood as one consultant has suggested a groundwater anomaly (a trough) exists across at least the eastern portion of the site while other consultants draw their groundwater contours across this anomalous area. As groundwater monitoring well MW-5, the well exhibiting the most elevated petroleum hydrocarbon concentrations, appears to be situated within this area of groundwater flow uncertainty, ACDEH requests a data review be performed to assess the geology and hydrology at the site.

2. **Groundwater:** As indicated in Item 1 above, the site fails to meet the LTCP General Criteria e (Site Conceptual Model) and Media Specific- Groundwater criteria due to inadequate groundwater flow definition. ACDEH requests preparation of a figure depicting the contaminant plume lengths using the LTCP *Technical Justification for Groundwater Plume Length, Indicator Constituents, Concentrations, Buffer Distances (Separation Distances) to Receptors* (LTCP Guidance; SWRCB 2012) to identify potential receptors within the average, 90-percentile and maximum contaminant plume lengths. ACDEH requests the figure be prepared using an aerial photographic base.

   ACDEH requests the adequacy of the well network be evaluated, including effects of well screen and well distribution, for capturing and delineating the contaminant plume. ACDEH also recommends the review include a correlation of the groundwater elevation with respect to flow direction across the area of groundwater flow uncertainty.

3. **Preferential Pathways:** ACDEH notes that data presented at the meeting indicate two sewer easements cross the property. It is unclear to ACDEH what the role of the sewer easements play with regard to groundwater flow. ACDEH requests a data review to evaluate the effects of the sewer easements on groundwater flow and if the sewers intersect groundwater.

   As presented at the meeting, evidence suggests the eastern-most sewer easement, crossing the property in a northeasterly- to southwesterly direction, is not occupied by a sewer. ACDEH requests verification of the presence/absence of utilities within this easement. Additionally, ACDEH recommends the data review for this easement evaluate whether or not earthwork was performed within the easement that could potentially affect the groundwater flow discussed in Item 1 above.

   ACDEH requests preparation of a site figures which includes the current facility, soil bore and monitoring well locations and location of utilities. Please include preparation of cross-sections presenting site features, including lithology, utilities, underground storage tanks (USTs), bores and wells with associated data and screen interval when appropriate, and depth to low and high water.

4. **Scope of Analysis:** In general, diesel has not been a target analyte at the site. However, significant concentrations of total petroleum hydrocarbons as diesel (TPHd) continue to be reported in analyses of groundwater collected from well MW-5, varying between 450 micrograms per liter (ug/L) to 4,300 ug/L in the past year of sampling (8/2016 to 8/2017). ACDEH notes early case file references to the site's underground storage tanks are as fuel tanks and a waste oil tank. The contents of the fuel tanks are not typically identified. ACDEH requests a review of historical records to determine if diesel was dispensed at the facility and if it should be considered as a chemical of potential concern (COPC). Based on the findings of the historical site usage, ACDEH requests a review of the scope of analysis to determine if the appropriate analysis scope (e.g. naphthalene) has been performed at the site.

5. **Facility Operations:** Operations at the station historically included vehicle servicing. In late March 2018, ACDEH performed a review of the California Environmental Reporting System (CERS) database and determined, in its current configuration, the station does not operate a vehicle repair facility and only dispenses gasoline fuels. ACDEH requests confirmation that the facility activities no longer include vehicle repair and that it does not dispense diesel fuel.

6. **Site Conceptual Model Update – Fuel Leak Case:** ACDEH requests preparation of a SCM Update incorporating the results and figures of Item 1 through Item 5 above. In addition, we request the SCM Update include comprehensive soil, grab-groundwater and groundwater monitoring tables. Please include the monitoring well screened interval in the monitoring well summary table.

7. **Waste Oil –** A 280-gallon waste oil tank (WOT) was removed in December 1989. A hole was observed in the WOT at the time of its removal. Analysis of soil collected from beneath the WOT identified both petroleum hydrocarbon and volatile organic compound (VOC) contamination associated with the WOT release. ACDEH requests a review of the data collected to date associated with the WOT with respect to potential vapor intrusion to indoor air (VI-IA) issues affecting the adjoining station structure. ACDEH requests preparation of a focused site conceptual model (SCM) with data gap identification using existing data to address the WOT. Please include a determination if sufficient data has been collected to evaluate the potential VI-IA risk. Based on this determination and the COPCs involved, ACDEH may open a separate Site Cleanup Program case to address the WOT release. ACDEH requests preparation of a draft SCM to be presented prior to our next meeting scheduled for June 5, 2018.

DELIVERABLE AND TECHNICAL REPORT REQUEST

Please upload technical reports to the State Water Board's GeoTracker website, in accordance with the following specified file naming convention and schedule. Provide ACDEH a notification email, Attention: Keith Nowell, of the GeoTracker submittal.

(1) Draft Focused Site Conceptual Model with Data Gap Identification- Waste Oil Tank
Due May 25, 2018

Submitted via electronic mail, Attention: Keith Nowell

(2) Site Conceptual Model Update- Fuel Leak Case
Due June 4, 2018

File to be named RO0000253_SCM_yyyy-mm-dd

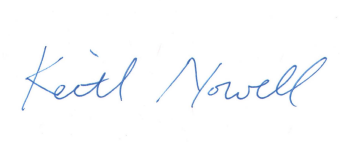
(3) June 5, 2018 Meeting

These technical reports are being requested pursuant to Section 13267 of the California Water Code.

CLOSING

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, Keith Nowell who can be reached by phone at (510) 567-6764 or by email at Keith.nowell@acgov.org.

Sincerely,



Digitally signed by Keith Nowell
DN: cn=Keith Nowell, o=Alameda County, ou=Department of Environmental Health, email=keith.nowell@acgov.org, c=US
Date: 2018.04.04 15:44:55 -07'00'

Keith Nowell, PG, CHG
Hazardous Materials Specialist

ENCLOSURES:

Attachment 1 – Responsible Party (ies) Legal Requirements/Obligations

DISTRIBUTION LIST:

Ed Ralston, Phillips 66 Company, Program Manager, (Sent via electronic mail to: Ed.C.Ralston@p66.com)

Katherine Szymanowski, Arcadis U.S., Inc., Principal Geologist, Project Manager, (Sent via electronic mail to: katherine.szymanowski@arcadis.com)

Tamera Rogers, Arcadis U.S., Inc., Project Manager, (Sent via electronic mail to: Tamera.Rogers@arcadis.com)

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

Keith Nowell, ACDEH, Hazardous Materials Specialist (Sent via electronic mail to: Keith.nowell@acgov.org)

Electronic File, GeoTracker

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 (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

- 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 values[1] as illustrated in the example below to facilitate ACDEH review and verify compliance with GeoTracker requirements.

GeoTracker Upload Table Example

Report Title	Sample Period	PDF Report	GEO_MAPS	Sample ID	Matrix	GEO_Z	GEO_XY	GEO_BORE	GEO_WELL	EDF
2016 Subsurface Investigation Report	2016 S1	✓	✓	Effluent	SO	☐	☐	☐	☐	✓
2012 Site Assessment Work Plan	2012	✓	✓			☐	☐	☐	☐	☐
2010 GW Investigation Report	2008 Q4	✓	✓	SB-10	W	✓	☐	☐	☐	✓
				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.