From:	Detterman, Karel, Env. Health
To:	"Jason Duda"
Cc:	Fiol, Greg (Greg.Fiol@arcadis.com); Matt Herrick; "Carmel, Charles"
Subject:	RE: RO 307 Status Fuel Leak Case R0307 - Global ID T06019734265 - ARCO #0402/Parking Lot, 1450 Fruitvale Avenue, Oakland, CA 94601
Date:	Friday, July 08, 2016 5:07:08 PM

Hello Jason:

Thank you for requesting an extension, which is provided below:

TECHNICAL REPORT REQUEST

Please upload a Soil and Groundwater Investigation Report presenting the results of the groundwater sampling and vapor intrusion assessment to the ACEH 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:

- **July 25, 2016 ~~July 11~~, 2016 –** *Soil and Groundwater Investigation Report*
  File to be named: RO307_SWI_yyyy-mm-dd

Sincerely,

Karel Detterman, PG
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6708
Fax: 510.337.9335
Email: karel.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Jason Duda [mailto:jduda@broadbentinc.com]
Sent: Friday, July 08, 2016 4:52 PM
To: Detterman, Karel, Env. Health
Cc: Fiol, Greg (Greg.Fiol@arcadis.com); Matt Herrick
Subject: RE: RO 307 Status Fuel Leak Case R0307 - Global ID T06019734265 - ARCO #0402/Parking Lot, 1450 Fruitvale Avenue, Oakland, CA 94601

Hello Karel,

I apologize for the last minute request but we would like to ask for a two week extension for submittal of the Soil and Groundwater Investigation Report associated with Former ARCO Station #402 in Oakland. The current deadline is set for July 11, 2016 and we would like to request an extension until July 25, 2016. The additionally requested groundwater monitoring/sampling has been conducted but the laboratory analytical results were not received until late June. Additionally, this Site was recently transferred to ARCADIS, which was finalized while I was on vacation last week. Broadbent is currently scheduled to complete this requested report and then future

correspondence and field activities will be coordinated and conducted by ARCADIS. Please let me know if this is acceptable and we will continue to finalize this report as soon as possible. Thank you. Have a great weekend.

Jason Duda
Senior Scientist

1370 Ridgewood Dr., Suite 5, Chico, CA 95973
[T] 530-566-1400 • [C] 530-592-6822 • [F] 530-566-1401
jduda @ broadbentinc.com

From: Detterman, Karel, Env. Health [mailto:Karel.Detterman@acgov.org]
Sent: Monday, May 09, 2016 6:34 PM
To: 'Carmel, Charles'
Cc: Jason Duda; Matt Herrick; Roe, Dilan, Env. Health
Subject: RO 307 Status Fuel Leak Case R0307 - Global ID T06019734265 - ARCO #0402/Parking Lot, 1450 Fruitvale Avenue, Oakland, CA 94601

Hello Mr. Carmel:

Thank you for submitting the following documents prepared and submitted on your behalf by Broadbent and Associates, Inc. (Broadbent):

- March 11, 2016 *Addendum Conceptual Site Model and Case Closure Request* (RFC Addendum)
- April 29, 2016 *First Quarter 2016 Status Report*

Alameda County Department of Environmental Health (ACEH) has evaluated the data and recommendations presented in the RFC Addendum in conjunction with the case files and the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP). The data presented in the RFC Addendum indicates that there is an increasing trend in total petroleum hydrocarbon as gasoline (TPHg) and benzene in downgradient well MW-7.

The updated Site Conceptual Model (SCM) of the RFC Addendum identified MW-5 as an upgradient well and MW-4, MW-6, and MW-7 as the downgradient wells and that MW-7 yielded the highest residual concentration in soil of 39 milligrams per kilogram (mg/kg) total petroleum hydrocarbon as gasoline (TPHg) at 15.5 feet below ground surface (bgs) while MW-4, located in the source area, had the lowest concentration in soil of TPHg 0.99 mg/kg at 7.5 feet bgs. Between December 2013 and May 2015 TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations in MW-4 have stabilized, but TPHg and BTEX concentrations in MW-7 have demonstrated an increasing trend. In March 2015

2,200 micrograms per liter (ug/ L) TPHg and 59 ug/L benzene were detected in MW-7. The wells were not monitored or sampled as per the First Quarter 2016 Status Report.

Due to the increasing concentration trend in MW-7, additional sampling is required to further evaluate the concentration trend and assess whether there is an additional unidentified source, and evaluate whether there is a vapor intrusion risk to occupants in the onsite commercial building. ACEH requests that you address the technical comments below, perform the work and submit a report documenting the results and analysis.

TECHNICAL COMMENT

1. **Source Identification and Groundwater Plume Stability Delineation:** Monitor the water levels in the four wells to determine the groundwater gradient direction and sample wells MW-4 and MW-7 for TPHg and BTEX only. Please provide the analytical results, the groundwater gradient figure, and a technical discussion describing possible reasons for the increasing trend of TPHg and BTEX in MW-7 groundwater and potential unidentified source areas.

2. **Vapor Intrusion Assessment.** Provide information on the foundation of the three story commercial building including whether the building has elevators and evaluate whether there is an adequate bioattenuation zone (requisite vertical separation to groundwater and TPH concentrations in the unsaturated zone) beneath the building to be protective of vapor intrusion to indoor air.

TECHNICAL REPORT REQUEST

Please upload a Soil and Groundwater Investigation Report presenting the results of the groundwater sampling and vapor intrusion assessment to the ACEH 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:

- **July 11, 2016 –** *Soil and Groundwater Investigation Report*
  File to be named: RO307_SWI_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.

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.

Karel Detterman, PG
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6708

Fax: 510.337.9335
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