

From: [Jacobsen, James](#)
To: [Detterman, Karel, Env. Health](#)
Cc: [Jacobsen, Brittani](#); [Edwards, Carl](#)
Subject: RE: Fuel Leak Case R0307 - Global ID T06019734265 - ARCO #0402/Parking Lot, 1450 Fruitvale Avenue, Oakland, CA 94601
Date: Monday, September 19, 2016 12:15:17 PM
Attachments: [image007.png](#)
[image005.png](#)
[image006.png](#)
[CA 402 Broadbent - Figure 1. Site Map.pdf](#)

Hi Karel,

Thank you for your response. Arcadis is now managing this open case and I'm the Project Manager. Please direct all future correspondences to my attention.

I have reached out to the property owner and asked for any information regarding the elevator. Hopefully she has the knowledge and availability to respond to your questions. In the interim I wanted to provide an initial reply based on my review of the project details.

From what I can determine from Google Street View, this is a 3-story commercial building. The location of the elevator appears to exist in the location of AEI-16 (a temporary boring completed in 2002). Please refer to Broadbent's site map (attached). The elevator appears to be attached to the building and accessible by an outdoor causeway.

In reviewing the data associated with AEI-16, it appears that the soil concentrations at 10' and 19' below ground surface are less than the residential direct exposure ESLs (Regional Water Board – S.F. Bay Environmental Screening Levels) and the 100 mg/kg GRO criteria as outlined in Scenario 3 of the LTCP. Also, the groundwater concentrations of benzene at AEI-16 are below the CA MCLs and the 100 ug/L benzene criteria as outlined in Scenario 3 of the LTCP. Though the incumbent did not incorporate this data into a comprehensive data set, as requested in the LUFT manual, the data was included as an attachment to the March 11, 2016 CSM and Case Closure Request (screen shot below). A second line of evidence indicating that a dissolved benzene plume is not in the area of the elevator is permanent monitoring well (MW-6); located within 20-feet. A review of the groundwater analytical data associated with MW-6 indicates the concentrations of BTEX/MTBE are also below the CA MCLs and Scenario 3 of the LTCP.

Based on these details, I believe Scenario 3 of the LTCP has been met and further assessment of the Vapor Intrusion pathway is not necessary.

Sample ID	TPH-g mg/kg	MTBE mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Xylenes mg/kg
AEI-13 10'	<1	<0.05	<0.005	<0.005	<0.005	<0.005
AEI-14 10'	<1	<0.05	<0.005	<0.005	<0.005	<0.005
AEI-15 10'	<1	<0.05	<0.005	<0.005	<0.005	<0.005
AEI-16 10'	<1	<0.05	<0.005	<0.005	<0.005	<0.005
AEI-16 19'	41	<0.2	<0.02	<0.02	0.038	0.079

Sample ID	Consultant	Date	TPH-g µg/L	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethyl- Benzene µg/L	Xylenes µg/L
GP 1	Glenfos	7/9/1998	170	-	0.53	<0.5	1.2	2.0
GP 4	Glenfos	7/9/1998	210	-	<0.5	<0.5	0.58	<1
GP 5	Glenfos	7/9/1998	17,000	-	42	24	820	110
GP 8	Glenfos	7/9/1998	20,000	<10	1,000	19	420	290
AEI GW 8'	AEI	5/27/1999	<50	<5.0	<0.5	<0.5	<0.5	<0.5
AEI-9W	AEI	8/23/1999	690	3.8	72	0.79	29	24
AEI-13 W	AEI	610-12/02	<50	<5.0	<0.5	<0.5	<0.5	<0.5
AEI-14 W	AEI	610-12/02	830	<5.0	0.56	2.7	1.2	2.9
AEI-15 W	AEI	610-12/02	<50	14*	<0.5	<0.5	<0.5	<0.5
AEI-16 W	AEI	610-12/02	190	<5.0	0.86	1.0	0.75	1.3

Finally, per the LTCP and as documented in the March 11, 2016 CSM and Case Closure Request, the areal extent of constituents-of-concern appears stable for the groundwater pathway and meets criteria 2 of the LTCP. The plume length is approximately 100-feet (please refer to Figure 7 of the March 11, 2016 CSM and Case Closure Request). Based on these details, further assessment of the groundwater pathway is not necessary; therefore, submittal of work plan or technical report is not warranted.

If you have any questions or comments pertaining to your continued assessment of the site for case closure under the LTCP, please let me know.

Thanks.

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Be green, leave it on the screen.

From: Detterman, Karel, Env. Health [mailto:Karel.Detterman@acgov.org]

Sent: Tuesday, August 30, 2016 10:36 AM

To: 'Carmel, Charles' <charles.carmel@bp.com>

Cc: 'Jason Duda' <jduda@broadbentinc.com>; Matt Herrick <mherrick@broadbentinc.com>; Jacobsen, James <James.Jacobsen@arcadis.com>; Roe, Dilan, Env. Health <Dilan.Roe@acgov.org>

Subject: 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 July 29, 2016 *Soil and Groundwater Investigation Report* prepared and submitted on your behalf by Broadbent and Associates, Inc. (Broadbent). Alameda County Department of Environmental Health (ACDEH) has evaluated the data and recommendations presented in the *Soil and Groundwater Investigation Report* (Report) in conjunction with the case

files and the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP). Sufficient data has not been presented to enable the successful evaluation of the LTCP's Vapor Intrusion to Indoor Air (VI/IA) Media Specific Criteria through the elevator shaft of the three-story building. Specifically, no data was presented concerning the location or depth of the elevator shaft as requested in ACDEH's May 9, 2016 directive letter.

TECHNICAL COMMENT

There are two ways to satisfy the LTCP VI/IA Media Specific Criteria:

- Scenario 1: Dissolved phase benzene concentration in groundwater;
- Scenario 2: Direct measurement of soil gas concentrations.

Under Scenario 1, a bioattenuation zone of 10 feet beneath the bottom of the elevator shaft must be present due to the benzene concentration of 130 micrograms per liter (ug/L) in MW-4 in June 2016. Based on groundwater level data in MW-4 and MW-7, located on either sides of the building, groundwater beneath the building can be assumed to rise as high as 10.63 feet. In order to satisfy the VI/IA criteria, the elevator shaft cannot extend greater than 1 foot below grade.

Under Scenario 2, soil gas measurements must be collected at a depth of 5 feet beneath the bottom of the elevator shaft. Soil gas samples collected at the site were advance to a maximum depth of 5 to 5.5 feet. This data is representative for at-grade construction and not for subsurface features such as elevators. The depth of the elevator must be determined in order to evaluate the appropriate methodologies and criteria to satisfy the LTCP VI/IA.

1. Please submit a figure indicating the location of the elevator and any subsurface features such as stair wells and a cross section indicating the depth of the elevator shaft and stair wells. Also, please identify if the elevator has a sump and the depth of the sump.
2. Please monitor and sample the four site monitoring wells to evaluate the increasing trend in MW-4.

TECHNICAL REPORT REQUEST

Please upload the requested report 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:

October 14, 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










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Alameda County Environmental Health
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Alameda, CA 94502
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PDF copies of case files can be downloaded at:

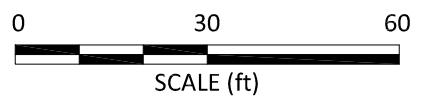
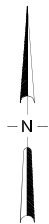
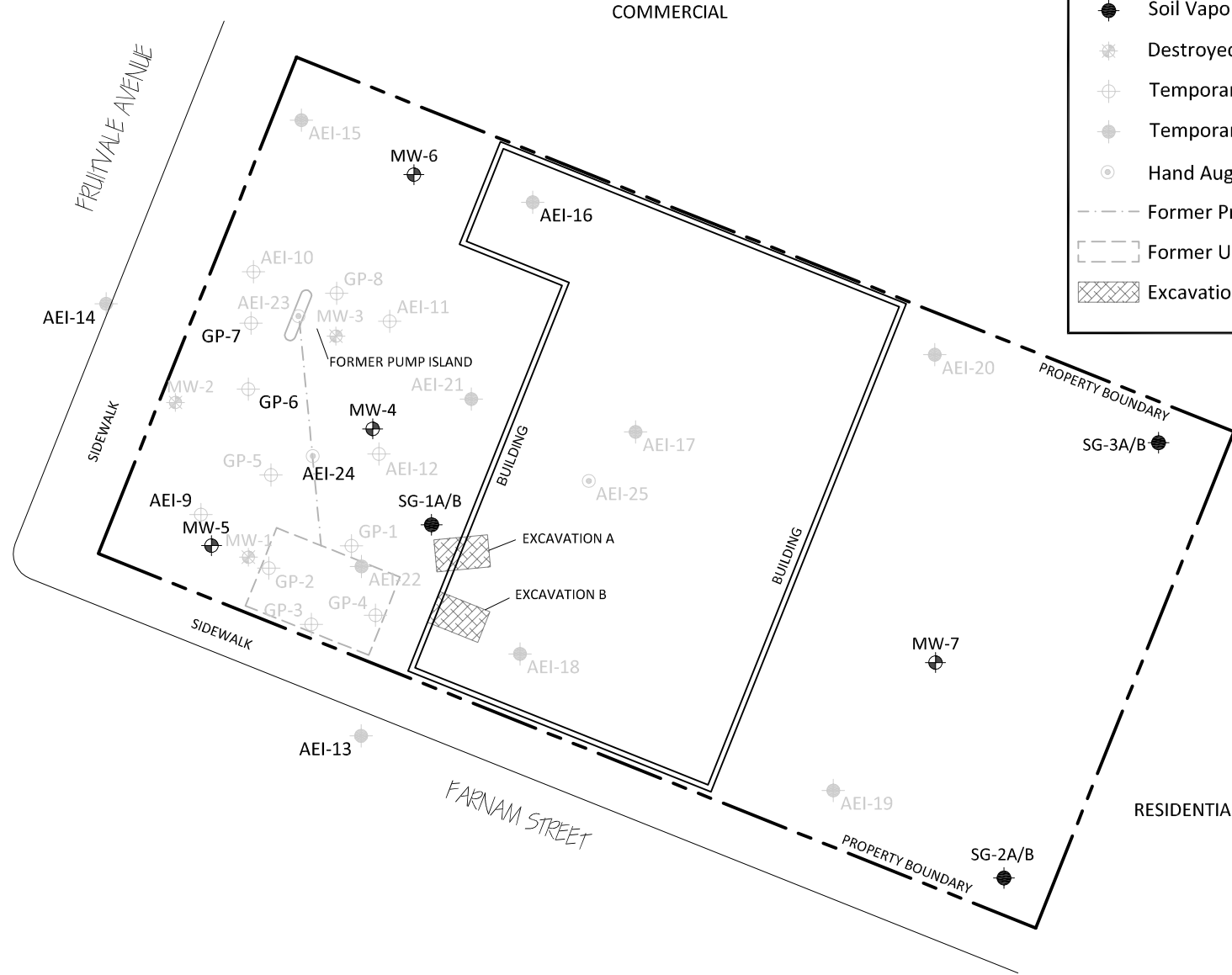
<http://www.acgov.org/aceh/lop/ust.htm>

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LEGEND

-  Monitoring Well Location
-  Soil Vapor Probe Location
-  Destroyed Monitoring Well Location
-  Temporary Boring Locations: 1998-1999
-  Temporary Boring Locations: June 2002
-  Hand Auger Boring Location: September 2002
-  Former Product Lines
-  Former UST Basin
-  Excavation

NOTE: SITE MAP ADAPTED FROM AEI CONSULTANTS FIGURES
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



BROADBENT
875 Cotting Lane, Suite G
Vacaville, California 95688
Project No.: 08-88-602 Date: 01/20/2014

ARCO Former Station No 402
1450 Fruitvale Avenue
Oakland, California

Site Map with Former and
Current Site Features

Drawing
2