

## Detterman, Mark, Env. Health

---

**From:** DeMayo, Toni [Toni.DeMayo@arcadis-us.com]  
**Sent:** Tuesday, July 15, 2014 3:32 PM  
**To:** Detterman, Mark, Env. Health  
**Cc:** Nichols, Taura; Bowring, Amanda  
**Attachments:** 99708 Memo To ACEH RE\_Site Investigation 07 15 2014.pdf

**Importance:** High

Hi Mark,

The memo attached serves as a follow up with a conversation between ARCADIS and the ACEH on Thursday, July 10, 2014, and a status of the site investigation at the Former Chevron Service Station, located at 5910 MacArthur Blvd., in Oakland, CA.

Please let me or Taura know if you have any questions.

Thank you!  
Toni

---

NOTICE: This e-mail and any files transmitted with it are the property of ARCADIS U.S., Inc. and its affiliates. All rights, including without limitation copyright, are reserved. The proprietary information contained in this e-mail message, and any files transmitted with it, is intended for the use of the recipient(s) named above. If the reader of this e-mail is not the intended recipient, you are hereby notified that you have received this e-mail in error and that any review, distribution or copying of this e-mail or any files transmitted with it is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately and delete the original message and any files transmitted. The unauthorized use of this e-mail or any files transmitted with it is prohibited and disclaimed by ARCADIS U.S., Inc. and its affiliates. Nothing herein is intended to constitute the offering or performance of services where otherwise restricted by law.



ARCADIS U.S., Inc.  
320 Commerce  
Suite 200  
Irvine  
California 92602  
Tel 714 730 9052  
Fax 714 730 9345

**MEMO**

To:  
Mr. Mark Detterman  
Alameda County Environmental Health

Copies:  
Project File

From:  
Toni DeMayo  
Project Manager

Date:  
July 11, 2014

ARCADIS Project No.:  
B0060901.9708

Subject:  
Site Investigation  
Chevron Site 99708, 5910 MacArthur Blvd, Oakland, CA  
ACEH Case #: RO124

---

Dear Mr. Detterman,

This memo serves as a follow up with a conversation between ARCADIS' and the ACEH on Thursday, July 10, 2014, regarding the site investigation at the Former Chevron Service Station, located at 5910 MacArthur Blvd., in Oakland, CA.

As discussed, ARCADIS has been preparing for a site investigation to assess soil, the off-site extent of the hydrocarbon plume and groundwater that could be flowing into the abandoned storm Lion Creek storm drain. During our discussion, ARCADIS explained the difficulties in obtaining encroachment permits from the City of Oakland which has resulted in the delay of the investigation. We understand that you have agreed to contact the City to help expedite this matter, if possible. ARCADIS also discussed the changes and the movement of the proposed boring locations. Figure 1 illustrates the proposed boring locations.

As a part of the site assessment activities, on July 2, 2014, ARCADIS visually inspected the property to identify underground utilities (i.e., above ground to below ground transitions and previous utility locating service ground markings). In addition to a visual inspection, Ground Penetrating Radar Systems, Inc. (GPRS), a utility locating subcontractor, conducted a geophysical survey throughout the site using ground

penetrating radar and electromagnetic methods. The locations of subsurface utilities identified during the July 2, 2014, survey were marked and are illustrated on the attached Figure 1

During the utility locate, the following borings had to be moved from their original location, or abandoned due to the proximity of underground utility lines and product lines. See Figure 1 for boring/well locations.

The following locations where moved or abandoned from their original location:

- Boring B-10 was moved approximately 5 feet to the northeast to be greater than 7 feet from the UST area.
- Boring B-11 was selected to evaluate potential release from the existing dispenser islands. Unfortunately, based on the results from the borehole clearance, ARCADIS will not be able to advance B-11 due to the presence of electrical lines and a sewer drain located immediately downgradient from the dispenser islands. However, analytical data collected from boring B-12 may be used to evaluate the potential for lateral dispersion from the area, if needed.
- Boring, B-13 was moved approximately 3 feet to the south to be greater than 5 feet from the sanitary sewer line.
- Monitoring well B-MW-8 was moved from their original street location to the adjacent sidewalk to alleviate health and safety risks associated with doing work in the street.
- Due to the setbacks in obtaining an encroachment permit, monitoring well MW-7, which is located in the right-of-way on the southwest corner of the site, will be moved east to the on-site property.

The proposed monitoring well, B-MW-9, was originally proposed to evaluate the propensity for the Underground Lions Creek Culver to provide a preferential pathway for groundwater to migrate from the site. In evaluating groundwater flow from the former Chevron Service station and the adjacent Huynh property (ACEH Case #RO0002959), which both indicate a northwesterly groundwater flow direction, it is unlikely that B-MW-9 would provide relevant information related to this objective. In addition, MW-5, which currently exists south and adjacent to the Lions Creek Culvert, the installation of B-MW-9 may be redundant. Moreover, based on the Huynh property data collected in 2011, which contained much more elevated concentrations of gasoline-related constituents in groundwater and in shallow soils, it would be difficult to discern the lateral dispersion of the Huynh property plume with any potential migration from the former Chevron Service Station. Based on TPG-g data collected in April 2011 from the Huynh property, elevated concentrations are observed in NWM-7 (5,700 ug/L), a monitoring well located approximately 40 feet from the proposed B-MW-9, supporting lateral dispersion and/or migration in this area from the Huynh property as TPH-g was not detected in groundwater samples on the former Chevron site in 2011 (or a majority of previous years), except in MW-5 (240 ug/L) which is located adjacent to the Huynh property.



If you are in agreement with this assessment regarding the removal of B-MW-9 from the future investigation, please let us know.

Based on the delay to obtain appropriate access from the City of Oakland to install wells within the ROW, ARCADIS requests an extension to perform intrusive activities until an appropriate permit can be obtained. If you have any questions or concerns, please contact me or Taura Nichols at [taura.nichols@arcadis-us.com](mailto:taura.nichols@arcadis-us.com) or 312-575-3723.