



March 16, 2018

Mr. Chuck Carmel, Operation Project Manager
Atlantic Richfield Company
4 Centerpointe Drive, Suite 200
La Palma, CA 90623 (Sent by e-mail to: charles.carmel@bp.com)

Subject: Conditional Work Plan Approval for Fuel Leak Case RO78 and GeoTracker Global ID
T0600100106 - ARCO #0374 - 6407 Telegraph Avenue, Oakland, CA

Dear Mr. Carmel:

Alameda County Department of Environmental Health (ACDEH) sent a November 16, 2017 Conditional Work Plan Approval Directive Letter for the *Shallow Soil Assessment and Monitoring Well Installation Work Plan* (Work Plan) dated August 23, 2017 submitted by Arcadis on behalf of the Atlantic Richfield Company. The Directive Letter provided conditional approval of the Work Plan with the following Technical Comments:

1. Request for Soil Vapor Sample Collection from Soil Gas Probes SG-1A, SG-2A/2B and SG-3A/B;
2. Non-approval of the proposed reinstallation of Monitoring Well MW-4;
3. Request for installation of two off-site and down gradient wells, MW-10 and MW-11, in Alcatraz Avenue;
4. Request for completion of Underground Utility Survey in Alcatraz Avenue;
5. Request to install five on-site soil borings SB-1, SB-2, SB-3, and SB-4, and a soil boring at the location of proposed MW-4R instead of installation of MW-4R.

On January 29, 2018 Alameda County Public Works Agency (ACPWA) sent a request to ACDEH for approval of a Drilling Permit Application and on February 6, 2018 ACDEH reviewed an e-mail from Arcadis describing the proposed field work to be completed under the Drilling Permit Application. ACDEH compared the proposed work with the ACDEH's November 16, 2017 Directive Letter (Directive Letter), noted significant differences between the proposed work and the conditionally approved work, and delayed approval of the ACPWA drill permit. New work is shown in **bold** and excluded approved work is shown in *italics*:

Arcadis February 6, 2018 proposed scope of work:

1. **Destruction of Soil Gas Probes on-site SG-1A and off-site SG-2A/2B and SG-3A/B;**
2. **Installation of one temporary new soil vapor probe on-site and near monitoring well MW-4R;**
3. Installation of two off-site and down gradient wells, MW-10 and MW-11 in Alcatraz Avenue;
4. *Request for completion of Underground Utility Survey in Alcatraz Avenue;*
5. Installation of five on-site soil borings SB-1, SB-2, SB-3, and SB-4, and a soil boring at the location of proposed MW-4R instead of installation of MW-4R.

ACDEH does not approve the proposed new work for the following reasons:

1. **Destruction of Soil Gas Probes SG-1A, SG-2A/2B and SG-3A/B:** The destruction of soil gas probes, specifically the off-site probes SG-2A/2B and SG-3A/B, is not acceptable because ACDEH is concerned with potential vapor intrusion risk to residents of the apartment complex. Additionally, because the bioattenuation zone in the site vicinity and under the apartment complex is less than 5 feet, ACDEH is concerned with potential vapor intrusion risk to commercial and residential

properties overlying the dissolved-phase benzene plume downgradient of MW-4. The off-site probes are located at the apartment complex which is located directly downgradient and within 20 feet of property line monitoring well MW-4 in which benzene detections are consistently in excess of 1,000 micrograms per liter (ug/L). Consequently, sampling of soil gas probes SG-1A, SG-2A/2B and SG-3A/B was requested to determine if vapor intrusion risk to the residents exists. If moisture is found to be present in the sample tubing during collection of soil gas samples, reinstallation of the off-site soil gas probes or an alternate method to assess the potential for vapor intrusion into the apartment complex may be proposed in a work plan addendum.

ACDEH requires wet and dry season soil vapor sample collection from the off-site soil gas probes to assess temporal and seasonal variations in soil gas concentrations, consistent with California Department of Toxic Substances Control's (DTSC) *Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air* (Vapor Intrusion Guidance) dated October 2011 and DTSC's *Advisory Active Soil Gas Investigations*, July 2015.

- 2. Installation of one temporary new soil vapor probe on-site and near monitoring well MW-4R:**
The installation of one temporary new soil vapor probe on-site is not acceptable because the site is an active gasoline services station, consequently, under the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP), the site itself is exempt from Media Specific Vapor Intrusion to Indoor Air and evaluation of on-site vapor concentrations that may or may not be applicable to an adjacent residential site is not appropriate.

Please implement the technical comments described in ACDEH's November 16, 2017 Directive Letter and this Directive Letter. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or the November 16, 2017 Directive Letter is proposed. We request that you address the preceding technical comments, perform the approved work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: karel.detterman@acgov.org) prior to the start of field activities.

REVISED TECHNICAL REPORT REQUEST

Please upload technical report to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **May 18, 2018 ~~January 19, 2018~~** – Soil, Soil Vapor, and Groundwater Investigation and Updated SCM Report
File to be named: RO78_SWI_R_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. Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>.

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.

Mr. Chuck Carmel
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Sincerely,

Karel Detterman, PG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 - Responsible Party(ies) Legal Requirements/Obligations
ACDEH Electronic Report Upload (ftp) Instructions

cc: James Jacobsen, Arcadis, 101 Creekside Ridge Court, Ste. 200 Roseville, CA 95678 (Sent via E-mail to: James.Jacobsen@arcadis.com)

Melanie Wong, Arcadis, (Sent via E-mail to: Melanie.A.Wong@arcadis.com)

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

Karel Detterman, ACDEH (Sent via E-mail to: karel.detterman@acgov.org)

Paresh Khatri, ACDEH (Sent via E-mail to paresh.khatri@acgov.org)

GeoTracker, Electronic Case File

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, Division 3, 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 values¹ 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
2012 Site Assessment Work Plan	2012	✓	✓			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2010 GW Investigation Report	2008 Q4	✓	✓	SB-10	W	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				SB-10-6	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				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.