

From: [Detterman, Karel, Env. Health](#)
To: "Gerald Shirar"
Cc: [Roe, Dilan, Env. Health](#)
Subject: FW: Fuel Leak Case RO140 - Roy Anderson Paints, Geotracker Global ID TO600101621, 3080 Broadway, Oakland, CA 94611
Date: Thursday, October 30, 2014 5:35:22 PM
Attachments: [Attachment 1 and ftpUploadInstructions 2014-05-15.pdf](#)
[Table 1 E-mail attachment.pdf](#)
[Table 3 E-mail attachment.pdf](#)

Hello Jerry:

Thank you for participating in the meeting with Alameda County Environmental Health (ACEH) at our office today for a discussion of your case.

ACEH staff has reviewed the case file including ACC Environmental Consultants (ACC's) *Groundwater Monitoring and Compliance Report* (Report) dated October 24, 2011, and the following bulleted list summarizes the main discussion topics during the meeting:

1. Based on our analysis of data, the groundwater concentrations of total petroleum hydrocarbons detected during the 9/12/2011 sampling event may be attributed to the off-site migration of the upgradient contaminant plume from Connell Oldsmobile, 3093 Broadway, Oakland (Fuel Leak case RO0000199) through the vicinity of Roy Anderson's Groundwater Monitoring Well (MW)-1;
2. A non-culvertized section of Glen Echo Creek is located 125 feet downgradient (northeast and east) of the site;
3. Soil samples collected and analyzed during the underground storage tank removal in 1993 indicated concentrations of chromium, nickel, lead, and zinc (see attached Table 3) in the sample from 6 feet below ground surface (bgs), but below laboratory detection limits in a sample from 8 feet bgs;
4. Well MW-1 was installed adjacent to the former UST location in 1994, but neither soil or groundwater samples were analyzed for metals;
5. MW-1 was redeveloped in 2011; all metal detections for the analyzed metals (cadmium, chromium, nickel, lead, and zinc) in groundwater exceeded the San Francisco Bay Regional Water Quality Control Board's Environmental Screening Levels (ESLs) and may indicate a secondary source of metals in the vicinity of the former UST (see attached Table 1);
6. A footnote at the bottom of the Report's Table 1 *Groundwater Analytical Table* indicated that metal analysis for these samples was run on unfiltered groundwater; however the Report does not describe if the groundwater samples were preserved with acid. If the groundwater samples were unfiltered and acidified, the acid can leach metals out of the sediment resulting in elevated metal results and ESL exceedance.

TECHNICAL COMMENTS

1. **Groundwater Monitoring Well Sampling:** ACEH requests a groundwater monitoring and sampling event to verify metal concentrations.
 - a. Prior to sampling the well, ACEH first requests submittal of a detailed description of groundwater sampling protocols including sampling procedures for metals including, but not limited to, the type and volume of sample container and whether or not the bottles are acidified. Please

submit the sampling protocols by e-mail to my attention
(karel.detterman@acgov.org).

- b. Upon ACEH's review, comment, and approval of the sampling protocols, the consultant may sample MW-1. Please prepare and submit a technical report by the deadline provided below.

- 2. Verification of Groundwater Monitoring Well Repair** – Please request your consultant to document in the technical report requested below that the well box for MW-1 was repaired and the well cap was replaced. Securing the well should minimize the potential for surface water runoff and/or illegally dumped contaminants entering the well, thereby raising the question of the reliability of all analytical data from the only site well.

TECHNICAL REPORT REQUEST

Please upload the technical report to the ACEH ftp site (Attention: Karel Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with Attachment 1 and the following specified file naming convention and schedule:

- **December 31, 2014** –Groundwater Monitoring and Sampling Letter Report
File to be named: RO140_GWM_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.

Karel Detterman, PG
Hazardous Materials Specialist
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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>

From: Detterman, Karel, Env. Health
Sent: Thursday, October 30, 2014 12:39 PM
To: 'Gerald Shirar'
Cc: Roe, Dilan, Env. Health
Subject: Fuel Leak Case RO140 - Roy Anderson Paints, Geotracker Global ID TO600101621, 3080 Broadway, Oakland, CA 94611

Hi Jerry:

I just read footnote number 1 at the bottom of ACC's Table 1 "Groundwater Analytical Table" that

says “metal analysis for these samples was run on *unfiltered groundwater*”.

I will send you the directive e-mail this afternoon.

Thank you,

Karel Detterman, PG
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Table 3
Summary of Heavy Metal Soil Sample Analytical Results
3080 Broadway Street, Oakland, California

<u>Constituent</u>	<u>Sample Depth (Feet)</u>		<u>Mean concentration</u> <u>for conterminous</u> <u>Western USA</u>	<u>TTL</u>	<u>STLC</u> <u>(mg/L)</u>
	<u>6</u>	<u>8</u>			
Cadmium	<1.0	<1.0	<1	100	1.0
Chromium	31	<5	41	2500	560
Nickel	53	<10	15	5000	20
Lead	17	<5	17	1000	5.0
Zinc	23	<20	55	5000	250

All results are in mg/kg unless otherwise indicated.

Mean concentrations obtained from USGS Professional Paper 1270, 1984, except for Cadmium.

Cadmium value from W.L. Lindsay, "Chemical Equilibria in Soils," 1979, Wiley.

TTL = Total Threshold Limit Concentration, CCR Title 22.

STLC = Soluble Threshold Limit Concentration, CCR Title 22.

TABLE 1
Groundwater Analytical Summary Table
3080 Broadway
Oakland, California
6989-001.00

Boring ID & Depth (feet bgs)	Sampling Date	Matrix	Constituents & Concentrations (ug/L)																								
			Volatile Fuel Hydrocarbons																	SVOCs		Metals					
			TPH4	TPH4	Benzene	n-Butylbenzene	sec-Butylbenzene	1,2-Dichlorobenzene	Ethylbenzene	Isopropylbenzene	4-Isopropylbenzene	Naphthalene	N-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes	TBA	DPE	Naphthalene	PCBs	Total Oil & Grease	Cadmium	Chromium	Nickel	Lead	Zinc
MW-1	12-Sep-11	Water	470	3900	1000	6.6	2.8	2.3	330	20	1.2	98	42	200	170	46	820	440	92	9.2	<0.52	<5200	4.2	130	180	20	180
MW-1	7/11/94	Water	<50	480	8.00	N/A	N/A	N/A	2.40	N/A	N/A	N/A	N/A	6.10	N/A	N/A	8.30	N/A	N/A	N/A	N/A	<0.05	N/A	N/A	N/A	N/A	N/A
**ESLs - Final Groundwater Screening Level	Groundwater is not a Current or Potential Source of Drinking Water	Water	210	210	46	NA	NA	200	43	NA	NA	24	NA	130	NA	NA	100	18000	NA	24	0.01	NA	0.25	11	8.2	2.5	81
PRG's	MCLs	Water	NA	NA	5	NA	NA	5	700	NA	NA	NA	NA	1000	NA	NA	10000	NA	NA	NA	0.5	NA	5	100	NA	15	NA

Notes
 **ESLs = Bay Area Regional Water Quality Control Board Environmental Screening Levels (Interim Final May 2009), where groundwater is NOT a source of Drinking Water
 PRGs=EPA Region 9 Preliminary Remediation Goal November 2009) MCLs=Maximum Contaminant Levels
 *Metals analysis for these samples was run on unfiltered groundwater.
 Shaded Values Exceed Their Respective Criteria
 NA= Not Applicable
 N/A= Not Analyzed
 ND= None Detected