From:	Detterman, Karel, Env. Health
To:	msepehr@somaenv.com
Cc:	ATHAN MAGGANAS; Roe, Dilan, Env. Health; "Guita Boostani"; "christoica@yahoo.com"; "Eric Daniels"; Stephen Glaudemans; "Moshe Dinar"
Subject:	Draft Workplan_RO0003066 Fuel Leak Case RO0003066 and GeoTracker Global ID T10000002456 - 6501 Shattuck Avenue, Oakland, CA
Date:	Thursday, October 17, 2013 4:29:06 PM

Hello Mansour:

As discussed during the 9/27/2013 meeting, ACEH and Mr. Eric Daniels, consultant for the site's neighbors, have reviewed the 10/14/2013 *draft Data Gap Investigation Work Plan*. We added two revisions (highlighted in yellow) to Mr. Daniels's 2nd and 4th bullets and request incorporation of the four bullets (including ACEH's revisions) into the *Final Data Gap Investigation Work Plan* to be submitted to ACEH by December 6, 2013, the Technical Report Request date provided in my 10/4/2013 e-mail.

Given these concerns, I suggest the following revisions to the plan (some of which are similar to what they state, but just make it more explicitly defined) (ACEH requested revisions):

- Continuous cores will be screened for PID values and visual observations of impact across the entire 7' - 15' bgs cored interval.
- Soil samples for laboratory analyses will be collected at roughly 1-ft intervals from 7 to 15 ft and sent to the lab for potential analyses. Exact depths for samples and determination of the final boring depth (minimum depth 15 feet) will be selected on the basis of locations of elevated PID (values above background levels as defined by comparing PID readings across the 7-15 ft interval, or any greater than 25 ppmv) or visual / olefactory evidence of impacts (staining, odor).
- Laboratory analysis will be performed on all samples with elevated PID or other field evidence of impacts.
- A minimum of three soil samples spanning the core depth between 7 and 15 ft will be analyzed including the sample at the bottom of the boring. If no indications of elevated PID or other field evidence of impacts are observed in the cored interval to guide soil sample selection for analysis, laboratory analyses will be conducted on three soil samples spaced at roughly 3 ft intervals along the core depth between 7 and 15 ft. For example, samples at roughly 8', 11' and 14' will be analyzed in the event that no field evidence of impacts are observed across the cored interval.

Thank you,

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: Eric Daniels [mailto:ericjd1963@hotmail.com]
Sent: Wednesday, October 16, 2013 8:33 AM
To: Detterman, Karel, Env. Health
Cc: Roe, Dilan, Env. Health; christoica@yahoo.com; guita@boostani.com
Subject: RE: Draft Workplan_RO0003066

Hi Karel,

I have reviewed the proposed workplan. Most of it looks good to me, including proposed boring location, depth, sampling and field screening methods. I have one substantial recommendation - suggested revisions for proposed strategy for selecting soil samples for laboratory analyses.

The plan proposes to select soil samples for analyses based on two criteria, as explained here:

> SOMA proposes that soil samples be collected at one foot intervals beginning at seven feet bgs (previous excavation extended to 7 feet under the tank). The first two soil samples (ex: 8 feet and 9 feet bgs) will be analyzed and if the samples come back above the laboratory reporting limit then the lab will analyze the next two samples. SOMA will also collect samples where PID readings or visual observations indicate the presence of significant soil contamination.

My concerns:

- I would not use criteria of impact results from the 8 ft and 9 ft bgs samples as guidance for whether deeper samples should be analyzed. We don't know the water table depth when a potential release occurred (appears that the water table could have been anywhere from 3 to 15 ft in depth, historically, based on the site data).
- I would like a basic requirement that soil lab analyses be conducted at a minimum of 3 samples spaced at roughly 3 ft intervals along the core depth between 7 and 15 ft., irrespective of field screening information suggesting impacts. PID field screening may not be accurate indicators of impact, particularly for saturated clayey soil below the water table, and for chlorinated solvent impacts, which can yield significant contaminant plumes sourced from relatively low concentration dissolved diffused source trapped in clayey intervals.

- Sample at 8', 11' and 14' would be ideal, for example, if there is no field screening guidance for sample analysis. Analyses should be conducted on three samples spanning the cored interval irrespective of field screening data, or lab data from any other samples.

- I concur with specific sample depths being chosen on the basis of elevated PID screening data or visual observations of impact. However, it does not specify what PID values would trigger sample selection. I would suggest "PID values above background levels, as defined by examining PID readings across the 7-15 ft interval, or any greater than 25 ppmv". I'm open to considering other explicit definitions of elevated PID that you think are reasonable.

Given these concerns, I suggest the following revisions to the plan (some of which are similar to what they state, but just make it more explicitly defined):

- Continuous cores will be screened for PID values and visual observations of impact across the entire 7' - 15' bgs cored interval.
- Soil samples for laboratory analyses will be collected at roughly 1-ft intervals from 7 to 15 ft and sent to the lab for potential analyses. Exact depths for samples will be selected on the basis of locations of elevated PID (values above background levels as defined by comparing PID readings across the 7-15 ft interval, or any greater than 25 ppmv) or visual / olefactory evidence of impacts (staining, odor).
- Laboratory analysis will be performed on all samples with elevated PID or other field evidence of impacts.
- A minimum of three soil samples spanning the core depth between 7 and 15 ft will be analyzed. If no indications of elevated PID or other field evidence of impacts are observed in the cored interval to guide soil sample selection for analysis, laboratory analyses will be conducted on three soil samples spaced at roughly 3 ft intervals along the core depth between 7 and 15 ft. For example, samples at roughly 8', 11' and 14' will be analyzed in the event that no field evidence of impacts are observed across the cored interval.

Thank you for giving me the opportunity to review and comment. I'll be ahppy to have further discussion on my suggestions.

Eric Daniels
Hydrogeologist on behalf of concerned residential property owners downgradient of the site

From: Karel.Detterman@acgov.org
To: ericjd1963@hotmail.com
CC: Dilan.Roe@acgov.org
Date: Tue, 15 Oct 2013 14:03:53 -0700
Subject: FW: Draft Workplan_RO0003066

Hi Eric: Attached is SOMA's work plan – please review it and e-mail me any concerns or suggestions.

Thank you,

Karel Detterman, PG
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Alameda County Environmental Health
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PDF copies of case files can be downloaded at:

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

From: Ruchi Mathur [mailto:rmathur@somaenv.com]
Sent: Monday, October 14, 2013 1:57 PM
To: Detterman, Karel, Env. Health
Subject: Draft Workplan_RO0003066

Dear Ms. Detterman:

Please find attached SOMA's draft workplan for Data Gap Investigation at 6501 Shattuck Avenue, Oakland as requested by you in your email directive dated October 4, 2013. Please feel free to call us if you have any questions or concerns.

Thank You,

Ruchi Mathur
Staff Engineer
SOMA Environmental Engineering, Inc.
Phone: 925-734-6400
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