



Engineering/Remediation
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San Francisco, CA 94104

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March 15, 2013

Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

RECEIVED

By Alameda County Environmental Health at 9:43 am, Mar 25, 2013

Cover Letter
Work Plan Addendum
Fuel Leak Case No. RO0000152/ GeoTracker ID T0600101570.

Engineering/Remediation Resources Group, Inc. (ERRG) is pleased to submit this work plan addendum for soil and groundwater sampling at 6159 Acacia Avenue, Oakland, CA.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Please contact me at (415) 730-7658 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Tiffany Angus", is written over a light blue rectangular background.

Tiffany Angus
Project Scientist

cc: Proposal File
Tyson Appel, ERRG Program Manager

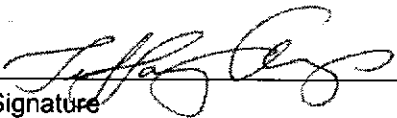
TO WHOM IT MAY CONCERN:

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Earle Shenk 3-14-13
Earle Shenk Date

**Work Plan Addendum for
Soil and Groundwater Sampling at
6159 Acacia Avenue, Oakland, California**

Submitted by:
Engineering/Remediation Resources Group, Inc.



Signature

Tiffany Angus

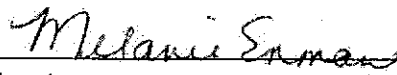
Name

March 18, 2013

Date

Project Manager

Title



Signature

Melanie Enman, P.G.

Name

March 18, 2013

Date

Senior Geologist

Title

CERTIFICATION

I hereby certify that the Work Plan Addendum for Soil and Groundwater Sampling at 6159 Acacia Avenue, Oakland California has been prepared under the direction and supervision of a qualified Professional Geologist.



Melanie Enman
California Professional Geologist No. 8143



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March 15, 2013

Ref.: 2012-002

Ms. Barbara Jakub
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Work Plan Addendum
Fuel Leak Case No. RO0000152/ GeoTracker ID T0600101570
6159 Acacia Avenue, Oakland CA 94618

Dear Ms. Jakub

Engineering/Remediation Resources Group, Inc. (ERRG) has prepared this this work plan addendum for the Final Work Plan for Soil and Groundwater Sampling at 6159 Acacia Avenue, Oakland, California dated September 2012. This addendum includes a revision to Figure 2, clarification of sample collection methodology, and analysis of soil and groundwater samples for naphthalene by Protection Agency (EPA) Method 8260B.

Site Maps

ERRG has revised the site map (Figure 2) to include the location of the proposed boring and sampling location. Additionally, the following note has been added to the figure: "Previous samples were collected below the former underground tank footprint, however the exact locations of the samples were not documented." The revised Figure 2 is presented in Attachment A.

Sample Collection Depths

The work plan specifies that three soil samples will be submitted for analysis, yet states that samples will also be collected based on indications of contamination including discoloration, odors, and PID responses, significant lithology changes, above the capillary fringe and at a minimum of five foot intervals. Three samples, or a sample from each five foot interval, is the minimum number of soil samples that will be collected and submitted for analysis if no indications of contamination are observed in the field. If additional samples are collected based on indications of contamination, they will be submitted for analysis.

Sample Analysis

Due to the historical presence of total petroleum hydrocarbons (TPH) diesel-range organics (DRO), soil and groundwater samples will also be analyzed for naphthalene by EPA Method 8260B. Table 1 has been revised to reflect the addition of naphthalene and is presented in Attachment B.

Ms. Jakub
March 15, 2013
Page 2



ERRG will provide ACEH with at least three business days notification prior to conducting the fieldwork.

Please contact me at (415) 730-7658 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Tiffany Angus", is written over the typed name.

Tiffany Angus
Project Scientist

cc: Tyson Appel, ERRG Program Manager

Attachment A




N:\Graphics\2012\2012-002_USCG\GIS\JUST_Location.mxd Last updated: 3/14/2013 at 12:46:30 PM



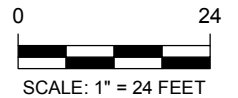
NOTE:

Previous samples were collected below the former tank footprint, however the exact location of the samples were not documented.

LEGEND:

-  Proposed Boring and Sample Location
-  Former 500-gallon Tank Location
-  Concrete Patio

SOURCES: USGS HIGH-RESOLUTION ORTHOIMAGE, USNG 10SEG655880 AND 10SEG670880
 COORDINATE SYSTEM: NAD 1983 CALIFORNIA STATE PLANE, ZONE 3
 PROJECTION: LAMBERT CONFORMAL CONIC



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CLIENT:	EARLE SHANK
LOCATION:	6159 ACACIA AVE. OAKLAND, CALIFORNIA

FORMER UNDERGROUND STORAGE TANK AND PROPOSED SAMPLING LOCATION MAP			
DRAWN BY:	CHECKED BY:	PROJECT NO.	FIG NO.
JJC 9/27/2012	TA 9/27/2012	2012-002	2

Attachment B

Table 1. Sample Methods, Containers, Holding Times, and Preservatives

Matrix	Analyte	Method	Container	Holding Time	Preservative
Solid	TPH-DRO	EPA 8015B	8-oz glass jars with Teflon-lined cap	14 days	4°C (ice)
	TPH-MRO	EPA 8015B	8-oz glass jars with Teflon-lined cap	14 days	4°C (ice)
	BTEX and naphthalene	EPA 8260B	Encores (three per sample)	14 days	4°C (ice)
Water	TPH-DRO	EPA 8015B	Pre-filtered into 250-mL polyethylene bottle pre-preserved with nitric acid	7 days	4°C (ice)
	TPH-MRO	EPA 8015B	Pre-filtered into 250-mL polyethylene bottle pre-preserved with nitric acid	7 days	4°C (ice)
	BTEX and naphthalene	EPA 8260B	Three 40-mL amber glass bottled pre-preserved with hydrochloric acid	14 days	4°C (ice)

Notes:

BTEX = benzene, toluene, ethylbenzene, and xylenes

EPA = U.S. Environmental Protection Agency

mL = milliliters

TPH-DRO = total petroleum hydrocarbons as diesel-range organics

TPH-MRO = total petroleum hydrocarbons as motor oil-range organics