

GEOSCIENCE & ENGINEERING CONSULTING

March 9, 2016

Mr. Mark Detterman Alameda County Health Care Services Agency Environmental Health Services Local Oversight Program 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502



Subject: Additional Workplan for Investigation of Soil-Gas and Potential Vapor Intrusion related to a Former Leaking Underground Heating Oil Tank located at 811 Paramount, Oakland, CA. (Alameda County Fuel Leak Case No. RO0003143 and CA GeoTracker Global ID T10000006106)

Dear Mr. Detterman:

On behalf of the property owners (Mr. Mark A. Jacobson & Ms. Ilona J. Frieden) Stellar Environmental Solutions, Inc. (Stellar Environmental) is providing this letter to memorialize our telephone conference of February 25, 2016 with you and the subject property owner regarding additional site investigation required by the Alameda County Health Care Services (ACHCS).

The purpose of the additional work is to address the ACHCS's concern that the two previous soil-gas sampling of well SG5.5 has shown an increasing concentration trend in benzene and TPH-gasoline and benzene; the detection of 1,1,2-trichoroethane; oxygen below the Low Threat Closure Policy (LTCP) criteria of 4%; and soil sampling to investigate TPHg and volatile organic compounds potentially related to the discolored green soil noted on the June 2015 investigation boring SG5.5 log that occurred between 3.5 and 6 feet below ground surface.

Soil-gas will be collected from soil-gas well SG5.5 in accordance with Department of Toxic Substances Control (DTSC)/Cal EPA Soil-Gas Advisory (April 2012) procedures and methodology as described in our June 20<sup>th</sup> and November 20, 2015 site investigation reports. Indoor-air will be collected in accordance with the DTSC/Cal EPA Vapor Intrusion Guidance (October 2011), using the procedures and methodology described in our previous site report, dated November 20, 2015.

The soil sample will be collected utilizing a stainless steel hand auger and boring to the top of the target depth followed with a hand-held drive hammer sampling tool. Soil samples will be Mr. Mark Detterman Alameda County Health Care Services March 9, 2016 Page 2 of 3

collected in a sampling sleeve inserted into the downhole end of the drive rod. The sampler will collect a relatively undisturbed 1.5-inch-diameter, 6-inch-long soil sample in a stainless-steel sleeve at the desired depth. The samples contained in the sleeves will be sealed with Teflon<sup>TM</sup> tape and non-reactive plastic caps, labeled, and placed in a chilled cooler. The sampling tool will be decontaminated with phosphate free soap and a triple rinse between sampling locations. It is anticipated that we will collect two samples from 3-3.5 and 4.5-5 feet bgs adjacent (within 2 feet) to soil-gas well SG5.5. Soil gas will be collected in SG5.5 prior to collecting the adjacent soil.

Attached Table 1 summarizes the proposed work and analyses.

We trust that this submittal meets your agency's needs. We declare, under penalty of perjury, that the information and/or recommendations contained in this document or report is true and correct to the best of our knowledge.

Please confirm you concurrence with the proposed action. If you have any questions regarding this report, please contact me if you have any questions.

Sincerely,

MCA ter for

Mark A. Jacobson Property Owner-Responsible Party

Henry Ketysch

Henry Pietropaoli, P.G Principal Geologist and Project Manager

Ilova Fieder

Ilona Frieden Property Owner-Responsible Party

Richard S. Makdisi, P.G. Principal Geochemist and President

Attachment: Table 1 Description of proposed sampling

cc: Mr. Amitai Schwartz - property owner counsel



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## Table: Description of Proposed Sampling and Analyses

Sampling Media		Compounds Detected Above ESL				Proposed action
(# of samples)	Oxygen	TPH- diesel	TPH gasoline	Benzene	TCA	
Soil-Gas	3%	240,000 ug/m <sup>3</sup>	2,000,000 ug/m <sup>3</sup>	600 ug/m <sup>3</sup>	4,300 ug/m <sup>3</sup>	Resampling and analysis for O <sub>2</sub> , methane, TO17 (with duplicate) and TO15 w/GRO
(1 from well SG-5.5) Indoor air (3)	-	ND	ND	0.20 ug/m <sup>3</sup>	ND	Resampling for TO15 w/GRO compounds in 3 locations; crawl space, basement and outdoor control
Soil (2)						Collect 2 soil samples from 3-3.5 and 4.5-5 feet deep near bore SG5.5 for TPHg, and method 8260 analysis