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By Alameda County Environmental Health at 9:56 am, Jul 23, 2014

July 23, 2014

Mr. Keith Nowell
Alameda County Health Care Services
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Formal Request for Site Closure
1409 – 1417 12th Street, Oakland, California

Dear Mr. Nowell:

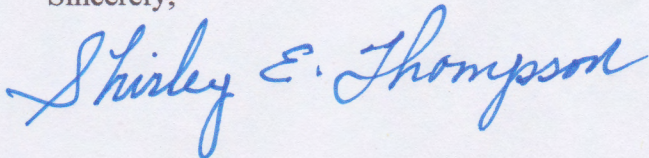
Attached is the Formal Request for Site Closure for the property located at 1409 – 1417 12th Street, Oakland, California.

Certification

I certify under penalty of law that this document and attachments are prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing the violations.

Please contact Joseph Cotton at (510)703-5420 if you have questions or comments.

Sincerely,



Shirley E. Thompson
Property Owner

**FORMAL REQUEST FOR SITE CLOSURE
1409-1417 12TH STREET
OAKLAND CALIFORNIA
ACEH File No. RO2933**

On behalf of Mrs. Shirley E. Thompson, Impact Environmental Services (Impact) submits this Formal Request for environmental corrective action closure for the property located at 1409-1417 12th Street in Oakland, California. It appears that soil and groundwater remediation via DPE and hydrogen peroxide groundwater dosing has significantly reduced petroleum hydrocarbons in groundwater. Constituents of concern are below or near respective ESLs in all groundwater wells and residual minor concentrations of petroleum hydrocarbon in groundwater are decreasing and contained within the boundaries of the subject property.

Soil and groundwater sample results were compared against the RWQCB's environmental screening limits (ESLs)¹ and Low-Threat Underground Storage Tank Case Closure Policy (LTCP)² to evaluate the suitability of the property for environmental corrective action closure.

Environmental Screening Limits

The results of closure verification soil, soil-vapor, and the most recent groundwater samples were compared to ESLs for a residential land-use where shallow groundwater is a source of drinking water. The RWQCB developed ESLs for residential land-use scenarios to provide a measure of whether corrective action closure, additional investigation, remedial action, or a more detailed risk assessment should be pursued. Constituents of concern were not detected at or above respective environmental screening limits in soil, groundwater, and soil-vapor samples collected from the subject property.

¹ San Francisco Bay Regional Water Quality Control Board, *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater-Interim Final*, May 2013.

² California Regional Water Quality Control Board: San Francisco Bay Region, *Low Threat Underground Storage Tank Case Closure Policy Final*, May 1, 2012.

Low-Threat Underground Storage Tank Closure Policy

Historical petroleum release studies have recognized that many petroleum release site pose a low threat to human health and the environment. As a result, the LTCP has been established to maximize the benefits to the people of the State of California through judicious application of available resources. Based on site-specific soil information presented in this report and prior reports, the site appears to meet the following general LTCP requirements as described below:

- 1) The unauthorized release is located in the service area of a public water system.
- 2) The unauthorized release consists only of petroleum.
- 3) The unauthorized primary release from the UST system has been stopped.
- 4) Free-product has been removed to the maximum extent practicable.
- 5) A conceptual site model that assesses the nature, extent, and mobility of the release has been developed,
- 6) Secondary sources have been removed to the extent practicable, and
- 7) Soil and groundwater has been tested for MTBE and results reported accordingly.

The lone LTCP general requirement that may not be met is the possibility that Nuisance conditions as defined by the Water Code section 130505 still exist in shallow soil in the two very limited former groundwater hot-spot areas near wells GW-1 and DPE-3. Construction workers may be at short-term risk of direct contact during any subsurface excavation in these two locations. However, this potential temporary exposure risk shall be managed through preventative measures including construction worker health and safety training and instituting a soil management plan where necessary.

Media-specific LTCP requirements have been met for groundwater beneath the subject property. Groundwater at the site does not exceed or are near water quality objectives. There is no free-product. The nearest existing water supply well or surface body is greater than 250 feet from the subject property. Residual low-level petroleum hydrocarbons in groundwater are less than 100 feet in length. Historical groundwater data appears to suggest that the residual hydrocarbons in groundwater are shrinking in aerial extent and attenuation exceeds any migration.

Media-specific LTCP requirements have been met for direct contact with contaminated soil and inhalation of contaminants volatilized to outdoor air. Soil-vapor samples collected from the subject property during recent verification closure sampling indicate that inhalation of contaminants volatilized to outdoor air poses no threat to human health at the subject property and surrounding area. The maximum concentration of petroleum constituents in soil are in general less than or equal to those listed in Table 1 of the LTCP for the specified depth below ground surface. Any potential temporary exposure from petroleum hot-spots soil can be controlled through the use of mitigation measures or through the use of institutional or engineering controls to the extent that the regulatory agency determines that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health.

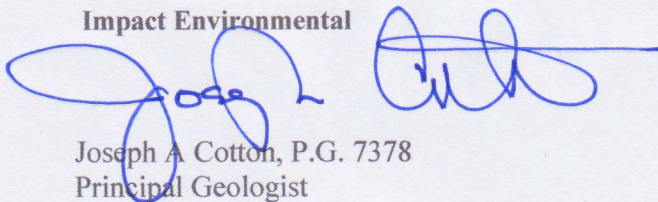
LIMITATIONS

Impact Environmental Services actions on this project were performed in accordance with current generally accepted environmental consulting principles and practices. This warranty is in lieu of all others, be it expressed or implied. Environmental conditions may exist at the site that could not be observed. Where the scope of services was limited to observations made during site reconnaissance, interviews, and/or review of readily available reports and literature, our conclusions and recommendations are necessarily based largely on information supplied by others, the accuracy and sufficiency of which may not have been independently reviewed by us. Our professional analyses are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions between such sampling points. Additional data from future work or changing conditions may lead to modifications to our professional opinions and recommendations. Any reliance on this report, or portions thereof, by a third party shall be at such party's sole risk.

PERJURY STATEMENT

I 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 my knowledge.

Impact Environmental



Joseph A. Cotton, P.G. 7378
Principal Geologist

