

RECEIVED

By Alameda County Environmental Health at 3:46 pm, Jun 16, 2014



June 6, 2014

1211.001.03.002

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

Attention: Mr. Mark Detterman

**Transmittal
Additional Information in Support of
LTCP Evaluation
1650 65th Street
Emeryville, California
Fuel Leak Case No. RO0000440
Geotracker Global ID T0600100511**

Dear Mr. Detterman:

Submitted herewith is the *Additional Information in Support of LTCP Evaluation, 1650 65th Street, Emeryville, California* prepared by PES Environmental, Inc.

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

Very truly yours,

GRIFFIN CAPITAL CORPORATION

A handwritten signature in blue ink that reads "Julie A. Treinen".

Julie A. Treinen
Managing Director, Asset Management

cc: Chris Baldassari, PES Environmental, Inc.



MEMORANDUM

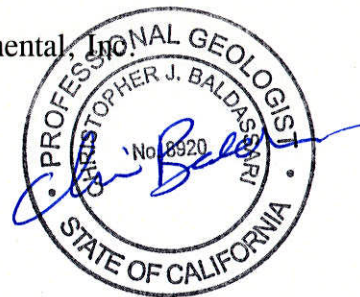
TO: Mr. Mark E. Detterman, P.G., C.EG – Alameda County Environmental Health
Ms. Dilan Roe, P.E. – Alameda County Environmental Health

FROM: Christopher J. Baldassari, P.G. No. 8920 – PES Environmental, Inc.
Robert S. Creps, P.E. – PES Environmental, Inc.

CC: Ms. Julie Treinen – Griffin Capital Corporation, LLC

DATE: June 6, 2014

SUBJECT: Additional Information in Support of LTCP Evaluation
1650 65th Street
Emeryville, California
Fuel Leak Case No. RO0000440
Geotracker ID T0600100511



PROJECT NO.: 1211.001.03.002

This memorandum has been prepared by PES Environmental, Inc. (PES), on behalf of Griffin Capital Corporation (Griffin) as agent for the fee owners of 1650 65th Street, in Emeryville, California (site). The purpose of this memorandum is to provide additional clarifying information requested by Alameda County Environmental Health (ACEH) in support of review of the site for case closure under the Low-Threat Closure Policy (LTCP, Policy). The requests for additional information include: (1) technical comments contained in a July 11, 2013 letter to Griffin (ACEH 2013 Letter)¹; (2) requests for additional information based on discussions during a meeting between ACEH, PES, and Griffin at ACEH offices on August 22, 2013; (3) electronic correspondence from ACEH staff on November 8, 2013²; (4) electronic correspondence from ACEH staff on March 4, 2014³; and (5) discussions between ACEH, PES, and Griffin during a conference call on May 5, 2014. The July 11, 2013 technical comments were based on ACEH's review of documents submitted on behalf of Griffin for the subject fuel leak case, including the *Low Threat Case Closure Evaluation* (LTCP Evaluation)⁴ and *Site Conceptual Model* (SCM)⁵.

¹ Alameda County Environmental Health (ACEH), 2013. *Additional Information Request, Fuel Leak Case No. RO0000440 and Geotracker Global ID T0600100511, Emery Bay Plaza, 1650 65th Street, Emeryville, CA 94608.* July 11.

² ACEH, 2013. *Electronic correspondence from ACEH to Chris Baldassari (PES).* November 8.

³ ACEH, 2014. *Electronic correspondence from ACEH.* March 4.

⁴ PES Environmental, Inc., 2013. *Low-Threat Case Closure Evaluation, 1650 65th Street, Emeryville, California, Fuel Leak Case No. RO0000440, Geotracker Global ID T0600100511.* May 22.

Mr. Mark Detterman
Ms. Dilan Roe
June 6, 2014
Page 2

1. General Criteria d; Removal of Free Product to the Maximum Extent Practicable

As noted in Technical Comment No. 1 of the ACEH 2013 Letter, petroleum hydrocarbon constituents were detected in soil above concentrations cited in a technical LTCP guidance document⁶ as indicative of the possible presence of free product. However, as we discussed, free product is not present and, furthermore, the site meets the criteria for removal of free product to the maximum extent practicable within the site source area. As noted in the LTCP Evaluation, free-phase petroleum product (i.e., light non-aqueous phase liquids [LNAPL]) was not identified during removal of the former underground storage tank (UST) and subsequent soil excavation, nor indicated as present based on groundwater monitoring results and field observations. Additional indications that the site does not have free-phase mobile or migrating product include:

- LNAPL was not observed in soil samples, nor on sampling and drill tooling retrieved from the soil borings placed in direct proximity of the former tank excavation area during the March 2012 investigation;
- Free product has not been observed in groundwater monitored by wells MW-2 and EW-2, located within the source area, over a 20-year monitoring period; and
- The conclusion that mobile or migrating LNAPL is not present at the site is consistent with LNAPL screening-level criteria described in both the *Technical Justification for Groundwater Media-Specific Criteria*⁷ (a supporting document prepared by SWRCB for LTCP evaluations) and the SWRCB's *Leaking Underground Fuel Tanks Guidance Manual* (LUFT Manual)⁸.

2. Vapor Intrusion into Indoor Air Media-Specific Criteria

During the August 22, 2013 meeting we discussed the methane collection, control, and monitoring system (methane control system). The purpose of the control system is to provide a safe pathway for naturally-occurring methane gas and lessens the potential for methane

⁵ PES Environmental, Inc. 2013. *Site Conceptual Model, 1650 65th Street, Emeryville, California, Fuel Leak Case No. RO0000440, Geotracker Global ID T0600100511*. May 22.

⁶ California State Water Resources Control Board, 2012. *Technical Justification for Vapor Intrusion Media-Specific Criteria*. March 21.

⁷ California State Water Resources Control Board, 2012. *Technical Justification for Groundwater Media-Specific Criteria*. April 24. The document further states that "...'free product' is primarily equivalent to migrating LNAPL... and secondarily equivalent to mobile LNAPL."

⁸ California State Water Resources Control Board, 2012. *Leaking Underground Fuel Tank Guidance Manual*. September.

Mr. Mark Detterman
Ms. Dilan Roe
June 6, 2014
Page 3

intrusion and accumulation within and beneath the building. As we also discussed: (1) groundwater concentrations within the source area are below San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for vapor intrusion; (2) although the methane control system is not intended to function as a fuel-related vapor intrusion mitigation system, the presence of the methane control system nevertheless provides considerable additional protection from potential petroleum vapor intrusion concerns; (3) conditions beneath the building indicate the presence of an effective bioattenuation zone (described further below); and (4) no significant data gaps remain.

Methane Collection, Control, and Monitoring System - Construction Details

As requested during the August 22, 2013 meeting with ACEH, the following provides a brief summary of the major components and operation of the methane control system:

- The methane control system was constructed under permit from and oversight by the Emeryville Fire Department;
- The methane control system is passive and has no mechanically or electrically operated components;
- The methane control system includes 24 individual vertical subgrade gas ventilation wells that passively vent to the atmosphere through piping extending to the roof; and
- The building interior is monitored continuously by 23 indoor methane sensors.

Regular maintenance and testing of the methane control system is periodically conducted. Service records documenting regular periodic maintenance activities performed by others for the methane control system are presented in Appendix A.

Representative Soil Vapor Samples

Noted in the ACEH 2013 Letter, and as discussed at the August 22, 2013 meeting, was the potential issue of sub-slab vapor samples that could have been influenced by the methane control system. However, the methane control system is a passive system (not active, as presumed in the ACEH 2013 Letter). In addition, and in accordance with the approved investigation work plan⁹, the sub-slab vapor probes were installed away from both the building edges and the nearest methane ventilation wells, thus further assuring the representativeness of the sub-slab vapor samples. The sub-slab vapor samples were collected in accordance with

⁹ PES Environmental, Inc., 2011. *Work Plan for Additional Investigation, 1650 65th Street, Emeryville, California, Fuel Leak Case No. RO0000440, Geotracker Global ID T0600100511.* July 22.

Mr. Mark Detterman
Ms. Dilan Roe
June 6, 2014
Page 4

methods and procedures outlined in Appendix G – Soil Gas Sampling Directly Under Building Foundations (Subslab Sampling) contained in the *Vapor Intrusion Guidance Document – Final Interim* published by the California Department of Toxic Substances (DTSC) on December 15, 2004 (revised February 7, 2005), as well as DTSC’s March 2010 *Advisory – Active Soil Gas Investigation*. A detailed description of the procedures and methodologies used during the sub-slab vapor sampling events was presented in the September 18, 2012 document entitled *Results of Additional Investigation Report*¹⁰.

Sub-Slab Vapor Result Comparison to DTSC Air Screening Levels

Petroleum hydrocarbon constituents (i.e., benzene, toluene, ethylbenzene, and xylenes [BTEX]) were not detected in vapor samples collected from sub-slab vapor probes SS-1 and SS-2. As discussed with ACEH on May 5, 2014, a theoretical factor of safety¹¹ can be estimated utilizing methods presented in the *Vapor Intrusion Guidance* as well as DTSC’s *Human Health Risk Assessment (HHRA) Note Number 3*¹². The factor of safety is estimated by multiplying the conservative indoor air attenuation factor for commercial buildings (0.05; representative of a 20-fold dilution) presented in Appendix B and Table 2 of the *Vapor Intrusion Guidance* times the sub-slab vapor sample laboratory reporting level for benzene¹³ (i.e., 3.19 micrograms per liter [$\mu\text{g/L}$]). The product represents the theoretical indoor air concentration; approximately 0.16 $\mu\text{g/L}$. Comparing this concentration against the DTSC-recommended commercial/industrial indoor air screening value for benzene (0.42 $\mu\text{g/L}$; presented in Table 3 of HERO HHRA Note Number 3) results in a factor of safety of 2.6.

Soil Concentrations Representative of a Bioattenuation Zone Beneath the Building

As clarified during the August 22, 2013 meeting, during the site investigation activities conducted in 2012, soil samples were collected at two interior locations (SB-1 and SB-2) beneath the building at depths of 4.5 and 9 feet below ground surface (bgs). Soil borings were also advanced at three additional exterior locations beneath the parking lot (SB-3, SB-4, and SB-5, all adjacent to the former tank excavation) with samples collected at approximately 4.5

¹⁰ PES Environmental, Inc., 2012. *Results of Additional Investigation, 1650 65th Street, Emeryville, California, Fuel Leak Case No. RO0000440, Geotracker Global ID T0600100511*. September 18.

¹¹ “factor of safety” is defined here as the factor by which a calculated hypothetical indoor air concentration could be increased without exceeding the respective DTSC indoor air screening level concentration.

¹² California Department of Toxic Substances Control, Office of Human and Ecological Risk (HERO), 2013. *Human Health Risk Assessment (HHRA) Note Number 3*. May 21.

¹³ As noted in the SWRCB’s June 30, 2011 document entitled *Technical Justification for Low-Threat Closure Scenarios for Petroleum Vapor Intrusion Pathway*, benzene has the highest toxicity of petroleum hydrocarbon VOC constituents and is the primary driver for vapor intrusion concerns.

Mr. Mark Detterman
Ms. Dilan Roe
June 6, 2014
Page 5

and 9 feet bgs. With the exception of potential future construction/trench workers, there are no health-risk receptors in the parking lot.

The soil samples collected beneath the building (from soil borings SB-1 and SB-2) represent bioattenuation zone conditions beneath the building, and should be utilized for evaluation for the potential for petroleum vapor intrusion to indoor air from soil as described in the Policy. The concentrations of petroleum hydrocarbons quantified as gasoline (TPHg) and diesel (TPHd) in the soil samples¹⁴ collected beneath the building (i.e., within the bioattenuation zone depth interval) sum to less than the Policy threshold-concentration of 100 milligrams per kilogram (mg/kg).

Additional support for meeting site-specific conditions satisfying the characteristics and criteria of the Policy (specifically, scenario 3, part 2 of Appendix 3 of the Policy) include:

- The concrete building slab is uniformly¹⁵ 0.5 feet thick and is underlain by 6 to 12 inches of coarse-grain material (i.e., aggregate base) directly beneath the slab. The presence of coarse-grain subslab materials indicates that sufficient air movement and mixing beneath the concrete slab can occur; and
- Historical depth-to-water measurements obtained between February 1994 [after the cessation of groundwater extraction activity in October 1993] through November 2012 (a total of 27 individual events) indicate that sufficient vadose zone material for a bioattenuation zone is present. The average thickness of unsaturated soil beneath the building during this period at source area well MW-2 was 10.73 feet bgs; 7.87 feet bgs at downgradient well MW-4; and 7.94 feet bgs at downgradient well MW-6. In addition to the average range of thicknesses in unsaturated zone, the high oxygen concentrations, as well as the absence of detectable concentrations of petroleum hydrocarbon vapors or methane in sub-slab vapor samples, indicates the presence of an active bioattenuation zone¹⁶ beneath the southeastern portion of the building.

¹⁴ Soil samples SB-1-4.5 and SB-2-4.5, collected at 4.5 feet bgs, respectively, and SB-1-9 and SB-2-8.5, collected between 8.5 and 9 feet bgs,

¹⁵ The building slab also contains a total of 40 2-foot thick by 3-foot wide concrete pier foundations, used to provide support beneath each vertical roof column.

¹⁶ PES Environmental, Inc. 2013. *Site Conceptual Model, 1650 65th Street, Emeryville, California, Fuel Leak Case No. RO0000440, Geotracker Global ID T0600100511*. May 22. Please refer to Table 2 of the 2013 SCM for compilation of historical depth to water measurements.

Mr. Mark Detterman
Ms. Dilan Roe
June 6, 2014
Page 6

No Downgradient Off-Site Vapor Intrusion Concern

As described in the SCM, groundwater monitoring and investigation data indicate that the groundwater flow direction is consistent (see discussion, below), and the groundwater plume is restricted to a localized, on-site area. The nearest potential downgradient off-site receptor consists of a multi-family residential complex (Bay Center) located at 6400 Christie Avenue. PES notes that this site has been constructed with ground-floor open-air parking areas with above-ground, podium-style occupant spaces. The podium-style building construction significantly reduces or eliminates the potential for vapor intrusion concerns into occupied residential units from underlying groundwater. Further, the 6400 Christie Street building overlies groundwater contamination originating from historical underground fuel storage tanks on that site (Geotracker ID SLT2005561). This site is currently being monitored with oversight by ACEH.

In summary, the sub-slab sample analytical results, oxygen data (comprised of results from sub-slab, 1-foot and 4-foot bgs sampling), soil data collected beneath the building, and the physical building and subsurface characteristics, collectively indicates the presence of an effective, active bioattenuation zone beneath the building, with sufficient vertical separation between dissolved-phase residuals in groundwater and the building slab. As such, and as discussed in the LTCP Evaluation, the site has sufficient bioattenuation zone characteristics (as depicted in Scenario 3 [Part 2] of Appendix 3 of the Policy), and the media-specific LTCP criteria for vapor intrusion into indoor air are effectively satisfied.

3. Direct Contact and Outdoor Air Media Specific Criteria

The ACEH 2013 Letter indicated concern regarding petroleum hydrocarbon residual concentrations in soil. However, as discussed in the SCM, the LTCP Evaluation, and below, although site soil concentrations exceed concentration thresholds listed in Table 1 of the LTCP, based on risk-based criteria the site does not present significant risk via either direct outdoor contact, or outdoor air inhalation. This reasoning, as we discussed in our August 22, 2013 meeting, is supported as follows:

- As noted in the SWRCB's *Technical Justification for Soil Screening Levels for Direct Contact and Outdoor Air Exposure Pathway*, and in accordance with United States Environmental Protection Agency (USEPA)¹⁷ and the Policy¹⁸, the target

¹⁷ U.S. Environmental Protection Agency (U.S. EPA), 1989. *Risk Assessment Guidance for Superfund, Volume 1, Human Health Evaluation Manual (Part A), Interim Final*. Office of Emergency and Remedial Response, Washington D.C., EPA/540/1-89/002. July.

Mr. Mark Detterman
Ms. Dilan Roe
June 6, 2014
Page 7

range for acceptable site-specific lifetime excess cancer risk (LECR) is from 1×10^{-6} to 1×10^{-4} ;

- For potential risks associated with volatilization from soil to outdoor air (for commercial/industrial site use) during trenching/construction, direct comparison between maximum soil concentrations (i.e., from samples collected in the parking lot adjacent to the former tank excavation) versus concentrations for the chemicals of concern presented in Table 1¹⁹ (representing 1×10^{-6} risk) of the Policy indicates an estimated LECR of approximately 1.5×10^{-5} . The actual risk is likely less due to the absence of consistent outdoor receptors in the parking lot (i.e., the location of the affected area at the site); and
- For utility worker direct contact criteria, the estimated LECR is approximately 1.1×10^{-5} (versus Table 1 concentrations), also well within the range considered protective of human health for commercial site use.

Additional discussion regarding LECR estimation is provided in Appendix B.

Site Management Control

As discussed during the August 22, 2013 meeting, the Intrusive Earthwork Guidance Plan (IEGP)²⁰ functions in a similar manner as a Site Management Plan. Potential risks from direct exposure to workers through temporary subsurface excavation or trenching is mitigated through implementation of the IEGP, which requires: (1) notification of potential hazards associated with planned subsurface site work; and (2) planning and implementation of appropriate health and safety procedures prior to and during subsurface excavations and/or construction activities.

We further clarified that, rather than prescribing Level D as the appropriate personal protective equipment (PPE) for site work, the IEGP established that the minimum allowable PPE for subsurface work at the site is Modified Level D. The IEGP states that the actual PPE required

¹⁸ The baseline acceptable risk utilized for the Policy is 4×10^{-6} (i.e., the sum of the four primary risk-driving constituents at a risk of 1×10^{-6} from benzene, ethylbenzene, naphthalene, and polyaromatic hydrocarbons (PAHs)).

¹⁹ The methodology for development of the conservative screening levels presented in Table 1 is provided in the SWRCB document entitled *Technical Justification for Soil Screening Levels for Direct Contact and Outdoor Air Exposure Pathways* (SWRCB, 2012a). For the target chemicals listed in Table 1, the final screening criteria was based on modeling concentrations that resulted in an estimated additional carcinogenic risk of 1×10^{-6} .

²⁰ PES Environmental, Inc. 2005. *Intrusive Earthwork Guidance Plan*, The Atrium at Emery Bay Plaza, 1650 65th Street, Emeryville, California. May 5.

Mr. Mark Detterman
Ms. Dilan Roe
June 6, 2014
Page 8

will be determined based on evaluation of potential risks to subsurface workers and stipulated in a work-scope specific health and safety plan prepared by a qualified environmental professional.

4. Groundwater Media-Specific Criteria

Overall Attainment of Groundwater Media-Specific Criteria

The site satisfies the groundwater media-specific criteria. As presented in the SCM, and discussed in the LTCP Evaluation, groundwater concentrations in the source area (monitored by wells MW-2, MW-4, MW-6, and EW-1) are below relevant regulatory comparison criteria, are stable or declining, and the plume has been defined and is limited to a restricted onsite area.

Additional Considerations Regarding Upgradient Well MW-8

As noted in the ACEH 2013 Letter and as we discussed on August 22, 2013 staff commented on the presence of benzene concentrations in well MW-8, and in particular, the potential for vapor intrusion. However, as noted in the Site Conceptual Model (SCM)²¹, petroleum hydrocarbon constituents were generally not detected at or above laboratory reporting limits during monitoring events conducted from 1994 through 2000 and, as such, the recent detections are likely from an upgradient off-site source. Comparisons of the average benzene-to-TPHg ratios for groundwater in well MW-2 (0.11) and well EW-1 (0.08) versus well MW-8 (4.96) also strongly suggest the presence of a less-aged fuel, and as such indicate the detections are not associated with the subject tank release.

Stable Groundwater Depths and Flow Direction

Based on our discussions, PES reviewed historical groundwater monitoring data to assess the potential for the presence of the petroleum hydrocarbons in well MW-8 due to variance in groundwater depth or flow direction. A plot depicting historical depth-to-water measurements at well MW-8 over time is presented in Appendix C. As indicated in the attached plot, groundwater levels have been generally stable over time. Based on the monitoring network groundwater elevations measurements, groundwater flow direction in the vicinity has also been consistently to the southwest. A rose diagram indicating estimated historical groundwater flow directions at the site is presented in Appendix D. The rose

²¹ PES Environmental, Inc. 2013. *Site Conceptual Model, 1650 65th Street, Emeryville, California, Fuel Leak Case No. RO0000440, Geotracker Global ID T0600100511*. May 22.

Mr. Mark Detterman
Ms. Dilan Roe
June 6, 2014
Page 9

diagram was compiled from groundwater elevation contour maps from available historical monitoring reports prepared over a 20-year period between 1992 and 2012.

Due to the presence of a continuous levee located approximately 250 west of the site (upon which Interstate Highway 80 was constructed), tidal influence from San Francisco Bay does not appear to significantly affect groundwater flow direction or elevation.

Indications of Limited Extent of Affected Groundwater in the Vicinity of MW-8

As presented in the SCM, concentrations of benzene and TPHg in wells MW-2 and EW-1 (located approximately 80 feet away, and directly downgradient, from well MW-8) are stable or declining, and collectively indicate: (1) these wells have not been significantly influenced by the concentrations detected in upgradient well MW-8; and (2) concentrations at these wells indicate that natural attenuation processes are likely restricting the areal extent of affected groundwater downgradient from the vicinity of MW-8.

Finally, there do not appear to be potential vapor intrusion exposure scenarios for commercial workers or residents in the vicinity of well MW-8. Well MW-8 is located in the central portion of the site parking lot; as such (and consistent with the evaluation presented in the SCM), there are no potentially exposed receptors under current and future anticipated use of the site. The adjacent property building is utilized as an unoccupied self-storage warehouse, and the office administration building is located in the southeast corner of the property in a separate building.

5. Intrusive Earthwork Guidance Plan

As noted in the ACEH 2013 Letter, prior testing at the site was conducted by others that detected low levels of various chemical parameters, unrelated to the subject LUST case. As we discussed in our August 22, 2013 meeting, these detections are associated with historic filling at the site that is typical of Bay margin properties, and do not present a material risk to users of the site.

6. Electronic Submittal of Information (ESI) Compliance

As discussed in the August 22, 2013 meeting, all pertinent and relevant information for the subject LUST case has been previously uploaded to ACEH and Geotracker websites.

Mr. Mark Detterman
Ms. Dilan Roe
June 6, 2014
Page 10

Attachments: Appendix A – Methane Control System Maintenance and Testing
Documentation
Appendix B – Conservative LECR Estimates for Residual Constituents of
Concern
Appendix C – Historical Depth-to-water Measurements over Time, Well MW-8
Appendix D – Rose Diagram - Historical Shallow Groundwater Flow Direction

APPENDIX A

**METHANE CONTROL SYSTEM MAINTENANCE AND
TESTING DOCUMENTATION**



Project: METHANE MONITORING & ALARM SYSTEM

ICR Project No. 6361

Project Location: 1650 65th Street, Emeryville, CA.

Requested by: Peter Hutchinson, Sr. Property Mgr. - TMG PARTNERS

Date: 10/24/06

Requested Services – Action Report

Technician: Bill Frederickson

Date: 10/26 & 10/27/06

8:30am-10:15am. Review Project File, Mobilize & Travel to Facility, Security ID & Pass.

10:15am- 12:15pm

Present System Status –

- >Monitoring Communicator Display – Alarm 3 Zone 3 that had not been cleared.
 - >PLC Output Module – No Alarm Relay Output LED's illuminated.
 - >Zone 7-1 Touch Screen Display 195%
 - >DC Power Supply to Sensors Breaker Line Side @ 25.3vdc, @ Load Side 24.13vdc.
Connect PC On-Line w/ PLC program, verify I/O & Errors, None.
 - > Z7-1 program rung 42 – Sensor input BCD data = 8000 (max BCD data for 4-20mA=4095)
 - > PLC Program Modification for enabling any Sensors that fails indicating trouble, will latch the Zone Group Warning 10% LEL output to the monitored Alarm Communicator.
 - > After program change download, the Z7-1 sensor that had failed, now latched 10% Warning Alarm signal to the communicator & the Monitoring Station which was on Test Status.
- Zone 7-1 Sensor.
- > Terminal Strip #MM19 recorded DC voltage supply was 24.23vdc & the sensor analog input signal was only 2.0mA (4mA is the min. value)
 - > Replaced field sensor w/ Re-Calibrated spare from 5/18/05.
 - > After power-up the replacement sensor PLC analog input signal value was 17 BCD. (10% LEL equal to 410 BCD analog program value Low Alarm set point)

12:15pm-1:15pm Travel return & demobilize @ Office.

2:30pm- 4:30pm Failed Sensor cleaning, zeroing & recalibrate w/ 50% LEL Gas, place on 24hr. test.

10/27/06 Complete report, print revised PLC Logic Program copies, file & TMG O&M Manual.

Remove sensor from 24hr.power-up test @ 3:15pm, store as system spare.

Cost Listings for Technical Support Services;

1. Mobilization & Travel ---2.75hrs @ \$70.00 p/ \$192.50
2. Site Technical ----- 2hrs @ \$90.00 p/ \$180.00
3. Documentation &
Sensor Re-Calib. ----- 2hrs @ \$75.00 p/ \$150.00

Total Cost for Services ----- \$522.50

Industrial - Commercial - Remediation - Automation - Controls - Engineering

351-A Sunset Drive - Antioch, CA 94509 – 925.757.8282 - FAX 925.757.5027
State Lic. No. C-10 354081 & C-10 649509 - Fed I.D. # 94-2744683



Project: METHANE GAS MONITORING & ALARM SYSTEM

ICR Project No. 6405

Project Location: 1650 65th Street, Emeryville, CA.

Requested by: Peter Hutchinson, Sr. Property Manager – TMG Partners

Date: 12/12/06

Requested Services – Action Report

Technician: Bill Frederickson

Date: 12/14/06 & 12/21/06

10:00am -11am Mobilize & Travel to Facility.

- > Alarm Communicator was in Trouble Status 'Ground Fault' indication, Peter called & placed system on-Test w/ Monitoring Co.
- > Further investigation discovered conflict with Communicator sharing Systems Battery Back-up with Methane Monitoring Controls.
- > Temporarily Isolated 1 set of 24vdc batteries for Communicator backup standby use only, will follow up following week w/ additional battery set for Communicator & reconnect isolated set of batteries on the Monitoring System side of controls.

1:00pm–2:00pm Demobilize return to Office, Docs & Material follow up.

12/21/06 – 7am-8:15am Mobilize, Travel, ID, Inspection, Pass & Escort to Control Panel.

- > Request Monitoring System Placed on Test Status.
- > Power down System Sensors, Programmable Logic Computer 'PLC', Screen & DC Power Supply.
- > Install 2ea. 12vdc 5AH batteries in series connection direct to the standby terminals of the Alarm Communicator.
- > Reconfigure the original system standby batteries for charging & backup from & for the Sensors and 'PLC' Operation.
- > Power up complete system, re-install input jumpers from PLC to Communicator, Acknowledge Communicator Trouble Alarms, Reset Screen & PLC for operation.

9am–11:00am Demobilize & Travel return to office, modify CAD drawing changes & print outs for file, client & system O&M Manuals.

Cost Listings for Technical Support Services;

- | | | |
|---|----------------------|----------------|
| 1. Mobilization & Travel | 3.25hrs @ \$70.00 p/ | -----\$ 227.50 |
| 2. Site Technical Services | 3.5hrs @ \$90.00 p/ | -----\$ 315.00 |
| 3. Materials: 2- Batteries & Terminations | | -----\$ 78.60 |
| 4. Documentation | 1.25 @ \$75.00 p/ | -----\$ 93.75 |

Total Cost for Services ----- \$ 714.85

Industrial - Commercial - Remediation - Automation - Controls - Engineering

351-A Sunset Drive - Antioch, CA 94509 – 925.757.8282 - FAX 925.757.5027

State Lic. No. C-10 354081 & C-10 649509 - Fed I.D. # 94-2744683



Project: METHANE GAS MONITORING & ALARM SYSTEM - #7214

Project Location: 1650 65th Street. Emeryville, CA.

Requested by: Susan @ TMG Partners 510-750-4213
Date: 4/25/07

Requested Services – Action Report

CELL CALL RECEIVED- ALARM PANEL FULL ALARM, FIRE DEPT DISPATCHED, ALL SCREEN FIELD SENSORS DISPLAY OUT-OF-RANGE 100% + LEL LEVELS.

Technician: Bill Frederickson
Date: 4/27/07

8:45am-10:00am Mobilize & Travel to Facility

- Initial review of Screen all Field Sensor display less than 2% LEL
- Treasury Dept. Supervisor Indicated strange circuit power outages effecting Emerg. Light Packs and Methane Monitoring Panel.
- Power Loss caused Sensors to drop off, transfer of backup 24vdc power caused all Sensors to range-out during transition warm up.
- Measure / Verify DC Power Supply 24vdc output, Standby Batteries voltages & terminations.
- Alarm Communicator was displaying Fire Alarm output signal for Zones 3,5,7 & 9 sent to monitoring company.

- Zones 3, 5, 7 & 9 output signal to Monitoring Company was programmed incorrectly, signal generated for these Zones need ID change as Warning Level output and Zones 4, 6, 8 & 10 as the Fire Alarm output signals.
- PLC Logic Program Inserts for additional blocking protection for future range-out of Sensors.
- Susan to follow up with Monitoring Co. changes and research 120vac circuits & breaker panel ID & location.

11:50am-1:00pm Demobilize & Travel Return to Office

Cost Listings for Technical Support Services;

1. Mobilization & Travel 2hrs @ \$70.00 p/ ----- \$ 140.00
2. Site Technical Services 2hrs @ 90.00 p/ ---- \$ 180.00
3. Doc's & Admin .5hrs @ 75.00 p/----- \$ 37.50

Total Cost for Services ----- \$ 357.50

Industrial - Commercial - Remediation - Automation - Controls - Engineering

351-A Sunset Drive - Antioch, CA 94509 – 925.757.8282 - FAX 925.757.5027
CSL No. C-10 354081 - Fed I.D. # 20-5602184

WORK ORDER



Date: 6/10/08	PMA No.
Customer No: 15082	Credit Approval

WORK ORDER NO: 020931

Name	Griffin Capital		
Street	5959 Snellmound Rd #210		
City	State	Zip Code	
Emerynville	CA	94608	
C/O:			

Name	US Treasury Expressions		
Street	1650 65th St		
City	State	Zip Code	
Emerynville	CA	94608	
C/O:			

Customer PO No.	BaaN No.	Marks (Job Name, etc):	Federal ID Number:	Service Rep. No: 609.29
-----------------	----------	------------------------	--------------------	-------------------------

FSR TYPE Demand Service Backlog Order Backlog Release Type 5 Warranty Service

LINE NO.	QTY	NUMBER	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
SUBTOTAL					\$ -
TAX					\$ -
TOTAL					\$ -

Type of Service - Describe Service(s) Rendered Below

Service Inspection Inspection Repairs New PM Contract Reno/Retro

TYPE OF SYSTEM: FIRE MFR: Midmark MODEL: DS/PMH2

Description of Service / Comments

(June 10th) EDWARDS tested ALL units below. TAMPAI ALL COMMON area devices including an EXPRESSING side. unable to test construction team at commander's disposal. Note: must return to completed methods. & Auditor on Expressing side. All modules work on this side. tested OK.

SERVICE REPRESENTATIVE	SERVICE MANAGER APPROVAL	CUSTOMER SIGNATURE (REQUIRED)	DATE
		[Signature]	6/10/08
DATE	DATE	PRINT NAME	TITLE
6/10/08		Susan Stuck	

Status Upon Departure

Completed Follow Up Parts Monitoring Online

Techs On-Site		Time Factor	Hrs.	Code	
Man #	Arrival	Departure	Regular Time	940	
29	9:00	3:00	Overtime		
Jaded	9:00	3:00	Double Time		
TRAVEL TIME			Miles	Hrs.	No. of Techs

SERVICE CODES

<input type="checkbox"/> 910-Warranty	<input checked="" type="checkbox"/> 940 - PMA	<input type="checkbox"/> 980 - Sales Call
<input type="checkbox"/> 922-Office Time	<input type="checkbox"/> 950-Demand Serv	<input type="checkbox"/> 985 - EST Training
<input type="checkbox"/> 923-Cust. Training	<input type="checkbox"/> 960 - FCO	<input type="checkbox"/> 990 - Service to Sales / Warranty
<input type="checkbox"/> 924-Vacation/Holiday	<input type="checkbox"/> 965-Travel Time	<input type="checkbox"/> 995 - Branch Meeting
<input type="checkbox"/> 925-III/Personal	<input type="checkbox"/> 970-Shop Repair	
<input type="checkbox"/> 930-Install	<input type="checkbox"/> 975-Unsched. Time	<input type="checkbox"/> Other -

Questions? Call 1-800-873-3392 **WORK ORDER - INVOICE TO FOLLOW**

WORK ORDER

Date 11/06/09	PMA No. _____
Customer No: _____	Credit Approval _____



WORK ORDER NO: **031642**

S Name			
O Street			
L City	State	Zip Code	
D			
T C/O:			

S Name	US TREASURY		
H Street	1650 65TH ST		
I City	State CA	Zip Code	
P			
T C/O:			

Customer PO No.	BaaN No.	Marks (Job Name, etc):	Federal ID Number:	Service Rep. No: 609
-----------------	----------	------------------------	--------------------	-----------------------------

FSR TYPE

Demand Service Backlog Order Backlog Release Type 5 Warranty Service

LINE NO.	QTY	NUMBER	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -

Type of Service - Describe Service(s) Rendered Below

Service Inspection Inspection Repairs New PM Contract Reno/Retro

SUBTOTAL \$ -
TAX \$ -
TOTAL \$ -

TYPE OF SYSTEM: **Fire** MFR: **Milburn** MODEL: **Q5**

Description of Service / Comments

**EDWARDS TESTED ALL HANDLES - VISUALS
ALSO TESTED ALL WINDOW & TAMPER. TESTED
BATTERY - PANEL FUNCTION (NOTE: UNABLE
TO TEST MATHAN DETECTORS NEED TO RE-SCHEDULE
MATHAN TEST. NEED TO REPLACE 4X12V7AH &
2X12V4.5 FOR MATHAN PANEL.**

SERVICE REPRESENTATIVE J. Schneider	SERVICE MANAGER APPROVAL	CUSTOMER SIGNATURE (REQUIRED) <i>[Signature]</i>	DATE 11/06/09
DATE	DATE	PRINT NAME	TITLE

Status Upon Departure

Completed FollowUp Parts Monitoring Online

Techs On-Site			Time Factor	Hrs.	Code
Man #	Arrival	Departure	RegularTime		940
29	9:00	10:30	OverTime		
01	9:00	10:30	DoubleTime		

TRAVEL TIME

Miles	Hrs.	No. of Techs
90	2	2

SERVICE CODES

<input type="checkbox"/> 910-Warranty	<input checked="checked" type="checkbox"/> 940 - PMA	<input type="checkbox"/> 980 - Sales Call
<input type="checkbox"/> 922-Office Time	<input type="checkbox"/> 950-Demand Serv	<input type="checkbox"/> 985 - EST Training
<input type="checkbox"/> 923-Cust. Training	<input type="checkbox"/> 960 - FCO	<input type="checkbox"/> 990 - Service to Sales / Warranty
<input type="checkbox"/> 924-Vacation/Holiday	<input type="checkbox"/> 965-Travel Time	<input type="checkbox"/> 995 - Branch Meeting
<input type="checkbox"/> 925-III/Personal	<input type="checkbox"/> 970-Shop Repair	
<input type="checkbox"/> 930-Install	<input type="checkbox"/> 975-Unsched. Time	<input type="checkbox"/> Other - _____

Questions? Call 1-800-873-3392

WORK ORDER - INVOICE TO FOLLOW



Project: METHANE GAS MONITORING & ALARM SYSTEM - #10105

Project Location: 1650 65th Street, Emeryville, CA.

Requested by: TMG Partners 510-750-4213

Requested Services – Action Report

Trouble shoot control panel not rebooting active after recent power supply breaker trip and restore upon breaker reset.

Technician: Bill Frederickson

Date: 1/7/10

- > Research found 120vac control power supply wire terminal, had loosen on the line side wire jumper tie between TS-ACB1 & TS-ACB2, ACB1 being the standby batteries charger. When the power supply circuit was restored, the power inrush surge effect opened the jumper supply between ACB1 & ACB2, ACB2 being the normal 120vac-24vdc supply power for the control panel.
- > The loss of 120vac supply power was initially sensed & activated, transferring the control panel power supply to the batteries, however when power was restored through ACB1 and not through ACB2, transfer from battery backup to the normal 24vdc operating supply via the DCTR transfer relay however due too the loose termination & no 120vac supply through ACB2, the normal 120vac – 24vdc power was not activated powering the PLC, screen & field Sensors.
- > Verify re-tightening check of all power supplies and control wiring termination, fire alarm annunciator / communicator.

7:00am -11:00am 4hrs @\$95.00 p/hr including travel.

Total \$380.00

Industrial - Commercial - Remediation Electrical, Inc.

351-A Sunset Drive - Antioch, CA 94509 – 925.757.8282 - FAX 925.757.5027
State Lic. No. C-10 354081 - Fed I.D. # 20-5602184

Carter Brothers Fire & Life Safety

500 W. Cypress Creek Road
Suite 650
Fort Lauderdale FL 33309
1-800-873-3392

Invoice

REMITTANCE

Carter Brothers, LLC
Wachovia Lock Box
P.O. Box 933815
Atlanta, GA 31193-3815

Job Location:

US TREASURY & EXP COLL (DS)
1650 65TH ST
A, B & C
EMERYVILLE CA 94608

Invoice#: 68550
Client Number: 15082
Cust. PO: SIGNED AGRMNT
Job Number: 21182
Contract #: DS 033819
Invoice Date: 09/15/2010

Billed To:

TMG MANAGEMENT
5959 SHELLMOUND RD
SUITE # 210
EMERYVILLE CA 94608

RECEIVED
SEP 29 2010

Part #	Mfg. Part#	Description	Unit Price	Qty.	Amount
50000	S-ILAVEF	Repair Labor	\$140.00	4.00	\$560.00
80000	S-IIPNF	Non GE parts	\$62.83	2.00	\$125.66

Notes:

Apprvl(s) <i>[Signature]</i>	Acctg Date
Date(s) 10-4-10	
Acct # P00030	\$
Acct # 5005-0011	\$
Acct #	\$
Acct #	\$
Desc.	
Bill back to	

Delivery:

Payment Terms: Net 30

Please state with your payment: Inv.# 68550

Non-Taxable Amount:	560.00
Taxable Amount:	125.66
Sales Tax:	12.25
Amount Due	697.91

WORK ORDER



58350

WORK ORDER NO: **033819**

Date: **9/2/2010** PMS No: **1312728**
 Customer No: **15062** Credit Approval

S Name: **Griffin Capitol % TMT Partners**
 H Street: **5459 Shellmound Rd, # 210**
 D City: **Emeryville** State: **CA** Zip Code: **94608**
 T C/O:

S Name: **TREASURY BLDG**
 H Street: **1850 65th ST.**
 D City: **EMERYVILLE** State: **CA** Zip Code: **94608**
 T C/O:

Customer PO No. **2182** Order No. **2182** Marks (Job Name, etc): Federal ID Number: Service Rep. No: **809-47**

FSR TYPE: Demand Service Backlog Order Backlog Release Type 5 Warranty Service

LINE NO	QTY	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1	4	50000 LABOR AND TRAVEL	140.00	\$ 560.00
2	8000	12V6A6 12VOLT 7AMP BATTERIES	62.83	\$ 126.66
FAX QUOTE TO SUSAN				
710-652-1967				

Type of Service - Describe Service(s) Rendered Below
 Service Inspection Inspection Repairs New PM Contract Reno/Retro

SUBTOTAL \$ 686.66
 TAX \$ 11.30
 TOTAL \$ 697.96

TYPE OF SYSTEM: Fire Alarm EST EST3

Description of Service / Comments:
 ARRIVED TO SYSTEM WITH TROUBLE ON FACP HORN CKT 1. TRACED WIRING TO BPS 3 IN STORAGE AREA ELECTRICAL ROOM. THE INPUT FROM THE FACP IS GOOD. THE OPEN IS ON THE OUTPUT SENSE FROM BPS 3. LABEL SAYS GOES TO BPS 4 IN EXPRESSIONS. FOUND POWER SUPPLY IN EXPRESSIONS MIDDLE ELECTRICAL ROOM. BATTERY TROUBLE AND CHARGING LIGHTS WERE ON. BATTERIES WERE VERY WARM. REPLACED THEM AND LEFT POWER SUPPLY DOOR OPEN. SYSTEM STILL WAS NOT CLEAR. THE OUTPUT CIRCUIT OF THE POWER SUPPLY IS SHORTED AND HAS AN INTERNAL FAULT. THIS MUST BE REPLACED AND END OF LINE RESISTORS REPLACED. LEFT SYSTEM FREE OF TROUBLES.

SERVICE REPRESENTATIVE: **G. WONACOTT** SERVICE MANAGER APPROVAL: **X** CUSTOMER SIGNATURE (REQUIRED): **Jillene Jantz** DATE: **9/2/10**
 DATE: **9/2/2010** PRINT NAME: **Jillene Jantz** TITLE: TEL. NO.:

Status Upon Departure:
 Completed FollowUp Parts Monitoring Online

Man #	Arrival	Departure	Regular Time	Overtime	Double Time	Rate
47						950
			Miles	Hrs.	No. of Tools	
			80	2	1	

SERVICE CODES:
 910-Warranty 940 - PMA 980 - Sales Call
 922-Office Time 950-Demand Serv 985 - EST Training
 923-Cust. Training 960 - PCO 990 - Service to Sales / Warranty
 924-Vacation/Holiday 965-Travel Time 995 - Branch Meeting
 925-III/Personal 970-Shop Repair 995 - Branch Meeting
 930-Install 975-Unsched. Time Other -

Questions? Call 1-800-873-3392

WORK ORDER - INVOICE TO FOLLOW

[Handwritten signature]

WORK ORDER



Date	9/2/2010		PMA No.
Customer No:			Credit Approval

WORK ORDER NO: **033819**

S Name			
L Street			
D City	State	Zip Code	
T			
O C/O:			

S Name	TREASURY BLDG		
H	TREASURY BLDG		
I Street			
P 1650 65th ST.			
T City	State	Zip Code	
EMERYVILLE	CA		
O C/O:			

Customer PO No.	Baan No.	Marks (Job Name, etc):	Federal ID Number:	Service Rep. No: 609-47
-----------------	----------	------------------------	--------------------	-----------------------------------

FSR TYPE: Demand Service Backlog Order Backlog Release Type 5 Warranty Service

LINE NO.	QTY	NUMBER	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1	4	50000	LABOR AND TRAVEL	140.00	\$ 560.00
	2	12V6A5	12VOLT 7AMP BATTERIES	62.83	\$ 125.66
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
				SUBTOTAL	\$ 685.66
				TAX	\$ 11.30
				TOTAL	\$ 696.96

Type of Service - Describe Service(s) Rendered Below
 Service Inspection Inspection Repairs New PM Contract Reno/Retro

TYPE OF SYSTEM: Fire Alarm MFR: EST MODEL: EST3

Description of Service / Comments
 ARRIVED TO SYSTEM WITH TROUBLE ON FACP HORN CKT 1. TRACED WIRING TO BPS 3 IN STORAGE AREA ELECTRICAL ROOM. THE INPUT FROM THE FACP IS GOOD. THE OPEN IS ON THE OUTPUT SENSE FROM BPS 3. LABEL SAYS GOES TO BPS 4 IN EXPRESSIONS. FOUND POWER SUPPLY IN EXPRESSIONS MIDDLE ELECTRICAL ROOM. BATTERY TROUBLE AND CHARGING LIGHTS WERE ON. BATTERIES WERE VERY WARM. REPLACED THEM AND LEFT POWER SUPPLY DOOR OPEN. SYSTEM STILL WAS NOT CLEAR. THE OUTPUT CIRCUIT OF THE POWER SUPPLY IS SHORTED AND HAS AN INTERNAL FAULT. THIS MUST BE REPLACED AND END OF LINE RESISTORS REPLACED. LEFT SYSTEM FREE OF TROUBLES.

SERVICE REPRESENTATIVE G. WONACOTT	SERVICE MANAGER APPROVAL	CUSTOMER SIGNATURE: (REQUIRED) 	DATE 9/9/10
DATE 9/2/2010	DATE	PRINT NAME J. Williams	TITLE TITLE
			TEL. NO.

Status Upon Departure
 Completed FollowUp Parts Monitoring Online

Techs On-Site			Time Factor	Hrs.	Code
Man #	Arrival	Departure	Regular Time		950
47			Overtime		
			Double Time		
TRAVEL TIME					
			Miles	Hrs.	No. of Techs
			80	2	1

SERVICE CODES

<input type="checkbox"/> 910-Warranty	<input type="checkbox"/> 940 - PMA	<input type="checkbox"/> 980 - Sales Call
<input type="checkbox"/> 922-Office Time	<input type="checkbox"/> 950-Demand Serv	<input type="checkbox"/> 985 - EST Training
<input type="checkbox"/> 923-Cust. Training	<input type="checkbox"/> 960 - FCO	<input type="checkbox"/> 990 - Service to Sales / Warranty
<input type="checkbox"/> 924-Vacation/Holiday	<input type="checkbox"/> 965-Travel Time	<input type="checkbox"/> 995 - Branch Meeting
<input type="checkbox"/> 925-III/Personal	<input type="checkbox"/> 970-Shop Repair	<input type="checkbox"/> Other -
<input type="checkbox"/> 930-Install	<input type="checkbox"/> 975-Unsched. Time	

WORK ORDER



Date	PMA No.
9/9/2010	
Customer No:	Credit Approval

WORK ORDER NO: 033840

S O L D T O

Name
Street
City State Zip Code
C/O:

S Name
H TREASURY BLDG
I Street
P 1650 65th ST.
City State Zip Code
T EMERYVILLE CA
O C/O:

Customer PO No. Baan No. Marks (Job Name, etc): Federal ID Number: Service Rep. No: 609-47

FSR TYPE
 Demand Service Backlog Order Backlog Release Type 5 Warranty Service

LINE NO.	QTY	NUMBER	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
			CLEANED METHANE PANEL		\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -

Type of Service - Describe Service(s) Rendered Below

Service Inspection Inspection Repairs New PM Contract Reno/Retro

SUBTOTAL \$ -
TAX \$ -
TOTAL \$ -

TYPE OF SYSTEM: Fire Alarm MFR: EST MODEL: EST3

Description of Service / Comments
 ARRIVED TO SYSTEM WITH TROUBLE ON FACP HORN CKT 1. TRACED WIRING TO BPS 3 IN STORAGE AREA THAT GOES TO POWER SUPPLY IN EXPRESSIONS. THIS IS BPS4 AND HAS AN INTERNAL FAULT. MOVED RESISTOR TO CLEAR PANEL TROUBLES. POWER SUPPLY WILL NEED TO BE REPLACED. SEND QUOTE TO TMG. METHANE PANEL HAS SENSOR IN ELEVATOR MACH ROOM GOING INTO SUPERVISORY. CLEANED DEVICE AND SYSTEM RESET. THIS WAS MISSED ON LAST INSPECTION.

LEFT SYSTEM FREE OF TROUBLES.

SERVICE REPRESENTATIVE: G. WONACOTT SERVICE MANAGER APPROVAL: _____ CUSTOMER SIGNATURE (REQUIRED): *[Signature]* DATE: 9/9/10
 DATE: 9/9/2010 PRINT NAME: _____ TITLE: _____ TEL. NO: _____

Status Upon Departure

Completed FollowUp Parts Monitoring Online

Techs On-Site		Time Factor	Hrs.	Code
Man #	Arrival	Departure	RegularTime	
47			OverTime	950
			DoubleTime	
TRAVEL TIME				
	Miles	Hrs.	No. of Techs	
	80	2	1	

SERVICE CODES

<input type="checkbox"/> 910-Warranty	<input type="checkbox"/> 940 - PMA	<input type="checkbox"/> 980 - Sales Call
<input type="checkbox"/> 922-Office Time	<input type="checkbox"/> 950-Demand Serv	<input type="checkbox"/> 985 - EST Training
<input type="checkbox"/> 923-Cust. Training	<input type="checkbox"/> 960 - FCO	<input type="checkbox"/> 990 - Service to Sales / Warranty
<input type="checkbox"/> 924-Vacation/Holiday	<input type="checkbox"/> 965-Travel Time	<input type="checkbox"/> 995 - Branch Meeting
<input type="checkbox"/> 925-III/Personal	<input type="checkbox"/> 970-Shop Repair	
<input type="checkbox"/> 930-Install	<input type="checkbox"/> 975-Unsched.Time	<input type="checkbox"/> Other - _____

Carter Brothers Fire & Life Safety

A Division of Carter Brothers, Inc.

Date <i>11-02-10</i>	PMA No.
Client No:	Credit Approval

WORK ORDER NO: 035958

Work Order

S	Name		
O	Street		
L	City	State	Zip Code
D	C/O:		

S	Name <i>US TREASURY</i>		
H	Street <i>1650 CHRISTY ST</i>		
I	City <i>EMERYVILLE</i>	State <i>OH</i>	Zip Code
P	C/O:		

Client PO No.	Master Builder No.	Marks (Job Name, etc):	Federal ID Number: 61-1517588	Service Rep. No: <i>2609-29</i>
---------------	--------------------	------------------------	---	------------------------------------

Work Order Type

Demand Service Backlog Order Backlog Release Warranty Service

LINE NO.	QTY	MASTER BUILDER PART NO.	PART NO.	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -

Type of Service - Describe Service(s) Rendered Below	SUBTOTAL
<input type="checkbox"/> Service <input type="checkbox"/> Inspection <input type="checkbox"/> Inspection Repairs <input type="checkbox"/> Project Install	TAX
	TOTAL

SYSTEM TYPE: *FIRE* MFR: *MILSTONE* MODEL: *QPS* #REFI

Description of Service / Comments

ARRIVED TO METRA FAC. TESTED WF/TAMPS 100% AUDIBLE VISUAL. ALL TESTED OK.

MSO TESTED ALL MANTAIN DEVICES ON TREASURY SIDE. ALL REPORTED TO PANEL. (NOTE, ZONE 7 IN ALARM UPON ANNUAL. CENTRAL NOT RECEIVING ZONE 7 ALARM. NEED TO EVALUATE UNIT).

SERVICE REPRESENTATIVE <i>J. Schilder</i>	SERVICE MANAGER APPROVAL	CUSTOMER SIGNATURE: (REQUIRED) <i>[Signature]</i>	DATE <i>11-02-10</i>
DATE <i>11-02-10</i>	DATE	PRINT NAME <i>[Signature]</i>	TITLE <i>[Signature]</i>

Status Upon Departure

Job Completed FollowUp Needed

Remittance Address

**Carter Brothers, Inc.
Wachovia Lock Box
P.O. Box 933815
Atlanta, GA. 31193-3815**

We now accept Visa & Mastercard.

Techs On-Site					Time Factor	Hrs.
Date	Man #	Arrival	Departure	Hrs.	RegularTime	
<i>3/9</i>					OverTime	
<i>26</i>					DoubleTime	
TRAVEL TIME						
					Miles	Hrs.

Tax Exempt

NO YES Exempt #: _____

Carter Brothers Fire & Life Safety

500 W. Cypress Creek Road
Suite 650
Fort Lauderdale FL 33309
1-800-873-3392

Invoice

REMITTANCE

Carter Brothers, LLC
Wachovia Lock Box
P.O. Box 933815
Atlanta, GA 31193-3815

Job Location:

US TREASURY & EXP COLL (DS)
1650 65TH ST
A, B & C
EMERYVILLE CA 94608

Invoice#: 64381
Client Number: 15082
Cust. PO: SIGNED AGRMNT
Job Number: 21182
Contract #: 040824
Invoice Date: 03/30/2011

Billed To:

TMG MANAGEMENT
5959 SHELLMOUND RD
SUITE # 210
EMERYVILLE CA 94608

RECEIVED
APR 04 2011

Part #	Mfg. Part#	Description	Unit Price	Qty.	Amount
50000	S-ILAVEF	Repair Labor	\$120.00	1.00	\$120.00
20810	SIGA-270	MANUAL STATION	\$98.00	1.00	\$98.00

Billing Cycle:

Notes:

[Handwritten Signature]

Date(s) 4-5-11

Acct # 0000 30 \$

Acct # 5005-0011 \$

Acct # _____ \$

Acct # _____ \$

Desc. _____

Bill back to _____

Delivery:

Payment Terms: Net 30

Please state with your payment: Inv.# 64381

Non-Taxable Amount:	120.00
Taxable Amount:	98.00
Sales Tax:	9.56
Amount Due	227.56

Carter Brothers Fire & Life Safety

500 W. Cypress Creek Road
Suite 650
Fort Lauderdale FL 33309
1-800-873-3392

Invoice

REMITTANCE

Carter Brothers, LLC
Wachovia Lock Box
P.O. Box 933815
Atlanta, GA 31193-3815

Job Location:

US TREASURY & EXP COLL (DS)
1650 65TH ST
A, B & C
EMERYVILLE CA 94608

Billed To:

TMG MANAGEMENT
5959 SHELLMOUND RD
SUITE # 210
EMERYVILLE CA 94608

RECEIVED
APR 04 2011

Invoice#: 64379
Client Number: 15082
Cust. PO: SIGNED AGRMNT
Job Number: 21182
Contract #: 040823
Invoice Date: 03/30/2011

Part #	Mfg. Part#	Description	Unit Price	Qty.	Amount
50000	S-ILAVEF	Repair Labor	\$420.00	1.00	\$420.00
80000	S-IIPNF	Non GE parts	\$238.00	1.00	\$238.00

Billing Cycle:

Notes:

Date(s) 4-5-11
 Acct # P00036 \$ _____
 Acct # _____ \$ _____
 Acct # 5005-0011 \$ _____
 Acct # _____ \$ _____
 Desc. _____
 Bill back to _____

Delivery:

Payment Terms: Net 30

Please state with your payment: Inv.# 64379

Non-Taxable Amount:	420.00
Taxable Amount:	238.00
Sales Tax:	23.21
Amount Due	681.21

Carter Brothers Fire & Life Safety

A Division of Carter Brothers, Inc.

Date: *03-28-11* PMA No.: *1212728*
 Client No.: *15082* Credit Approval: *[initials]*

WORK ORDER NO: *040823*

Work Order

S O L D T O	Name: <i>Griffin Capitol c/o TMG Partners</i>	S Name: <i>U.S. Treasury</i>
	Street: <i>1659 Shellmound Rd. #210</i>	S Street: <i>1650 Christie St</i>
	City: <i>Emeryville</i> State: <i>CA</i> Zip Code: <i>94608</i>	S City: <i>EMERYVILLE</i> State: <i>CA</i> Zip Code: <i>94608</i>
	C/O:	S C/O:

Client PO No. *21182* Master Builder No. *21182* Marks (Job Name, etc):
 Federal ID Number: *61-1517588* Service Rep. No: *609-29*

Work Order Type: Demand Service Backlog Order Backlog Release Warranty Service

LINE NO	QTY	MASTER BUILDER PART NO	PART NO	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
<i>1</i>	<i>1</i>	<i>50000</i>		<i>AV. LABOR</i>		<i>\$ 400.00</i>
<i>2</i>	<i>1</i>	<i>50000</i>	<i>TR-2110</i>	<i>MASTERMOUNT SCISSOR</i>		<i>250.00</i>

Type of Service - Describe Service(s) Rendered Below: Service Inspection Inspection Repairs Project Install

SUBTOTAL: *650.00*
 TAX: *27.00*
 TOTAL: *677.00*

SYSTEM TYPE: *[scribble]* MFR: *[scribble]* MODEL: *[scribble]* #REF1: *[scribble]*

Description of Service / Comments:
ARRIVED TO ZONE #7 IN ALARM TRUCK 5.1 FRONT LOBBY ELEVATOR MACH ROOM. REPAIRING TRUCK #1 TESTED TRUCK #2. ALSO FOUND ZONE #2 TRUCK 6.1 AND FLOOR TOP OF STAIRS AT 195 & CLEANED AND TESTED SYSTEM THROUGHT FREE UPON DEPARTURE.

SERVICE REPRESENTATIVE: *J. Schneider* SERVICE MANAGER APPROVAL: *[signature]* CUSTOMER SIGNATURE (REQUIRED): *[signature]* DATE: *03-28-11*

DATE: *03-29-11* PRINT NAME: *[scribble]* TITLE: *[scribble]* TEL NO.:

Status Upon Departure: Job Completed Follow Up Needed

Remittance Address: **Carter Brothers, Inc.**
Wachovia Lock Box
P.O. Box 933815
Atlanta, GA. 31193-3815

We now accept Visa & Mastercard.

Date	Man #	Arrival	Departure	Hrs.	Time Factor		Hrs.
					Regular Time	Overtime	
<i>03/29</i>	<i>Gavin</i>						
					TRAVEL TIME		
					Miles	Hrs.	

Tax Exempt: NO YES Exempt #:

3/30/11

Questions? Call 1-800-873-3392

WORK ORDER - INVOICE TO FOLLOW
ORDER ENTRY / OFFICE COPY

Carter Brothers Fire & Life Safety

A Division of Carter Brothers, Inc.

Date: 10/28/11 PMA No. _____
 Client No: _____ Credit Approval _____

WORK ORDER NO: **044572**

Work Order

S Name _____
 O Street _____
 D City _____ State _____ Zip Code _____
 T C/O: _____

S Name 105 The Summit
 H Street 1650 65th St
 P City Emeryville State CA Zip Code _____
 T C/O: _____

Client PO No. _____ Master Builder No. _____ Marks (Job Name, etc): _____ Federal ID Number: 61-1517588 Service Rep. No: 60979

Work Order Type
 Demand Service Backlog Order Backlog Release Warranty Service

LINE NO.	QTY	MASTER BUILDER PART NO.	PART NO.	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -

Type of Service - Describe Service(s) Rendered Below
 Service Inspection Inspection Repairs Project Install

SUBTOTAL _____
 TAX _____
 TOTAL _____

SYSTEM TYPE: FIRE MFR: ... MODEL: Q5-9 #REFI _____

Description of Service / Comments
(S/N/P/N) Tested All Alarm Devices & 1008
Smoke Visuals - All tested OK.
2ACP was left upon departure.

SERVICE REPRESENTATIVE: [Signature] SERVICE MANAGER APPROVAL: _____ DATE: 10/28/11
 CUSTOMER SIGNATURE (REQUIRED): [Signature] DATE: 10/28/11
 PRINT NAME: [Name] TITLE: _____ TEL NO: _____

Status Upon Departure
 Job Completed FollowUp Needed

Remittance Address
Carter Brothers, Inc.
Wachovia Lock Box
P.O. Box 933815
Atlanta, GA. 31193-3815
 We now accept Visa & Mastercard.

Techs On-Site					Time Factor	Hrs.
Date	Man #	Arrival	Departure	Hrs.	Regular Time	
	<u>26</u>				Overtime	
	<u>26</u>				Double Time	
TRAVEL TIME						
					Miles	Hrs.

Tax Exempt: NO YES Exempt #: _____

Carter Brothers Fire & Life Safety

A Division of Carter Brothers, Inc.

Date <i>10/28/11</i>	PMA No.
Client No.	Credit Approval

WORK ORDER NO: **044573**

Work Order

S
O
L
D
T
O

Name		
Street		
City	State	Zip Code
C/O:		

Name <i>Expressions College</i>		
Street <i>1650 65th St</i>		
City <i>Atlanta</i>	State <i>GA</i>	Zip Code
C/O:		

Client PO No.	Master Builder No.	Marks (Job Name, etc):	Federal ID Number: 61-1517588	Service Rep. No.
---------------	--------------------	------------------------	---	------------------

Work Order Type

Demand Service Backlog Order Backlog Release Warranty Service

LINE NO.	QTY	MASTER BUILDER PART NO.	PART NO.	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -

Type of Service - Describe Service(s) Rendered Below

Service Inspection Inspection Repairs Project Install

SUBTOTAL
TAX
TOTAL

SYSTEM TYPE: *Test* MFR: *CC* MODEL: *05* #REF!

Description of Service / Comments

*(5:00 PM) Tested 100% audible 16 chimes
Also tested all manual call points.*

*Note: Unit to be continued tomorrow
in EDS.*

TRIP WAS TEST CLEAR UPON DEPARTURE.

SERVICE REPRESENTATIVE <i>WBS</i>	SERVICE MANAGER APPROVAL	CUSTOMER SIGNATURE (REQUIRED) <i>X [Signature]</i>	DATE <i>10/28/11</i>
DATE	DATE	PRINT NAME <i>[Signature]</i>	TITLE <i>[Signature]</i>
			TEL NO.

Status Upon Departure

Job Completed FollowUp Needed

Techs On-Site					Time Factor	Hrs.
Date	Man #	Arrival	Departure	Hrs.	Regular Time	
	<i>29</i>				OverTime	
	<i>15/10/4</i>				DoubleTime	
TRAVEL TIME						
					Miles	Hrs.

Remittance Address

Carter Brothers, Inc.
Wachovia Lock Box
P.O. Box 933815
Atlanta, GA. 31193-3815

We now accept Visa & Mastercard.

Tax Exempt

NO YES Exempt #: _____

APPENDIX B

**CONSERVATIVE LECR ESTIMATES FOR RESIDUAL
CONSTITUENTS OF CONCERN**



MEMORANDUM

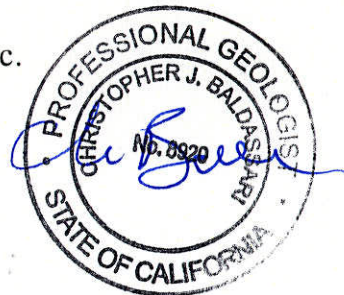
TO: Mr. Mark E. Detterman, P.G., C.E.G. – Alameda County Environmental Health
Ms. Dilan Roe, P.E. – Alameda County Environmental Health

FROM: Christopher J. Baldassari, P.G. – PES Environmental, Inc.
Robert S. Creps, P.E. – PES Environmental, Inc.

CC: Ms. Julie Treinen – Griffin Capital Corporation, LLC

DATE: June 6, 2014

SUBJECT: Conservative LECR Estimates for Residual Constituents of Concern
1650 65th Street
Emeryville, California
Fuel Leak Case No. RO0000440
Geotracker ID T0600100511



PROJECT NO.: 1211.001.03.002

This memorandum has been prepared by PES Environmental, Inc. (PES), on behalf of Griffin Capital Corporation (Griffin) as agent for the fee owners of 1650 65th Street, in Emeryville, California (site). This memorandum provides further documentation for the additional lifetime excess cancer risk (LECR) estimated in the Site Conceptual Model (SCM)¹, previously submitted on behalf of Griffin for the subject fuel leak case, as requested by Alameda County Environmental Health (ACEH)². Relevant components of a site-specific risk assessment for human health concerns were presented in the SCM, and included evaluation of potential preferential pathways, potential receptors, direct and indirect exposure pathways, potential ecological receptors, and assessment of potential human health risk. As presented in the SCM, no direct contact or soil incidental ingestion/dermal contact pathway exists for the site. Direct contact with soil for utility and construction workers during temporary subsurface excavation or trenching is regulated by the Intrusive Earthwork Guidance Plan (IEGP), which functions in a similar manner as a Site Management Plan (SMP). However, as a conservative measure, site soil data was compared versus Table 1 of the State Water Resource Control Board's (SWRCBs) *Low Threat UST Policy Case Closure Policy* (Policy)³.

¹ PES Environmental, Inc. 2013. *Site Conceptual Model, 1650 65th Street, Emeryville, California, Fuel Leak Case No. RO0000440, Geotracker Global ID T0600100511*. May 22.

² ACEH, 2013. *Telephonic correspondence between ACEH and Chris Baldassari (PES)*. November 8.

³ State Water Resources Control Board (SWRCB), 2012. *Resolution 2012-0016: Low-Threat Underground Storage Tank Case Closure Policy*. March 15.

**Mr. Mark Detterman and
Ms. Dilan Roe
June 6, 2014
Page 2**

The estimated LECR presented in the SCM is based on the conservative scenarios and mathematic model presented in Table 2⁴ in the SWRCB's *Technical Justification for Soil Screening Levels for Direct Contact and Outdoor Air Exposure Pathway (Technical Justification)*⁵, which was utilized in calculating the concentrations presented in Table 1 of the Policy. Derivation of the screening levels are presented in the *Technical Justification*. The targeted risk levels presented in the Policy are in accordance with United States Environmental Protection Agency (USEPA)^{6,7} target range for acceptable site-specific lifetime excess cancer risk (LECR) of 1×10^{-6} to 1×10^{-4} .

Estimation of the cumulative cancer risk is determined using the maximum site soil concentration, and calculating a ratio of the primary chemicals of concern (COCs) identified in the Policy (benzene, ethylbenzene, naphthalene, and polyaromatic hydrocarbons [PAHs]) that exceeded the concentrations listed in Table 1. The ratios are multiplied by 1×10^{-6} (the target risk) using the formula below:

$$Risk = \left[\left(\frac{conc_x}{Table\ 1_x} \right) + \left(\frac{conc_y}{Table\ 1_y} \right) + \left(\frac{conc_z}{Table\ 1_z} \right) \right] \times 10^{-6}$$

Based on the exposure assessment presented in the SCM, conservative risk estimates for potential scenarios at the site include: (1) volatilization from soil to outdoor air; and (2) utility worker direct contact. The results for each scenario are presented below:

- Maximum site soil concentrations (presented in milligrams per kilogram [mg/kg]) exceeded the concentrations associated with potential volatilization from soil to outdoor air for commercial/industrial use presented in Table 1 of the Policy for benzene and ethylbenzene. The calculated LECR indicates an estimated LECR of approximately 1.5×10^{-5} :

- $Risk = \left[\left(\frac{^{160}benzene}{^{12}Table\ 1\ benzene,5-10\ ft\ bgs} \right) + \left(\frac{^{290}ethylbenzene}{^{134}Table\ 1\ ethylbenzene,5-10\ ft\ bgs} \right) \right] \times 10^{-6}$

- $Risk = 1.5 \times 10^{-5}$

⁴ Table 2: *Equations Used to Develop Soil Screening Levels for the Direct Contact Pathways for a Commercial/Industrial Exposure Scenario.*

⁵ SWRCB, 2012. Final: *Technical Justification for Soil Screening Levels for Direct Contact and Outdoor Air Exposure Pathways*. March 15.

⁶ U.S. Environmental Protection Agency (U.S. EPA), 1989. *Risk Assessment Guidance for Superfund, Volume 1, Human Health Evaluation Manual (Part A), Interim Final*. Office of Emergency and Remedial Response, Washington D.C., EPA/540/1-89/002. July.

⁷ The baseline acceptable risk utilized for the Policy is 4×10^{-6} (i.e., the sum of the four primary risk-driving constituents at a risk of 1×10^{-6} from benzene, ethylbenzene, naphthalene, and polyaromatic hydrocarbons (PAHs)).

**Mr. Mark Detterman and
Ms. Dilan Roe
June 6, 2014
Page 3**

- PES notes that the actual risk is likely less due to the absence of consistent outdoor receptors in the parking lot; and
- For utility worker direct contact criteria, the estimated LECR is approximately 1.1×10^{-5} :

- $$Risk = \left[\left(\frac{160_{benzene}}{14_{Table 1 benzene, 0-10 ft bgs}} \right) \right] \times 10^{-6}$$

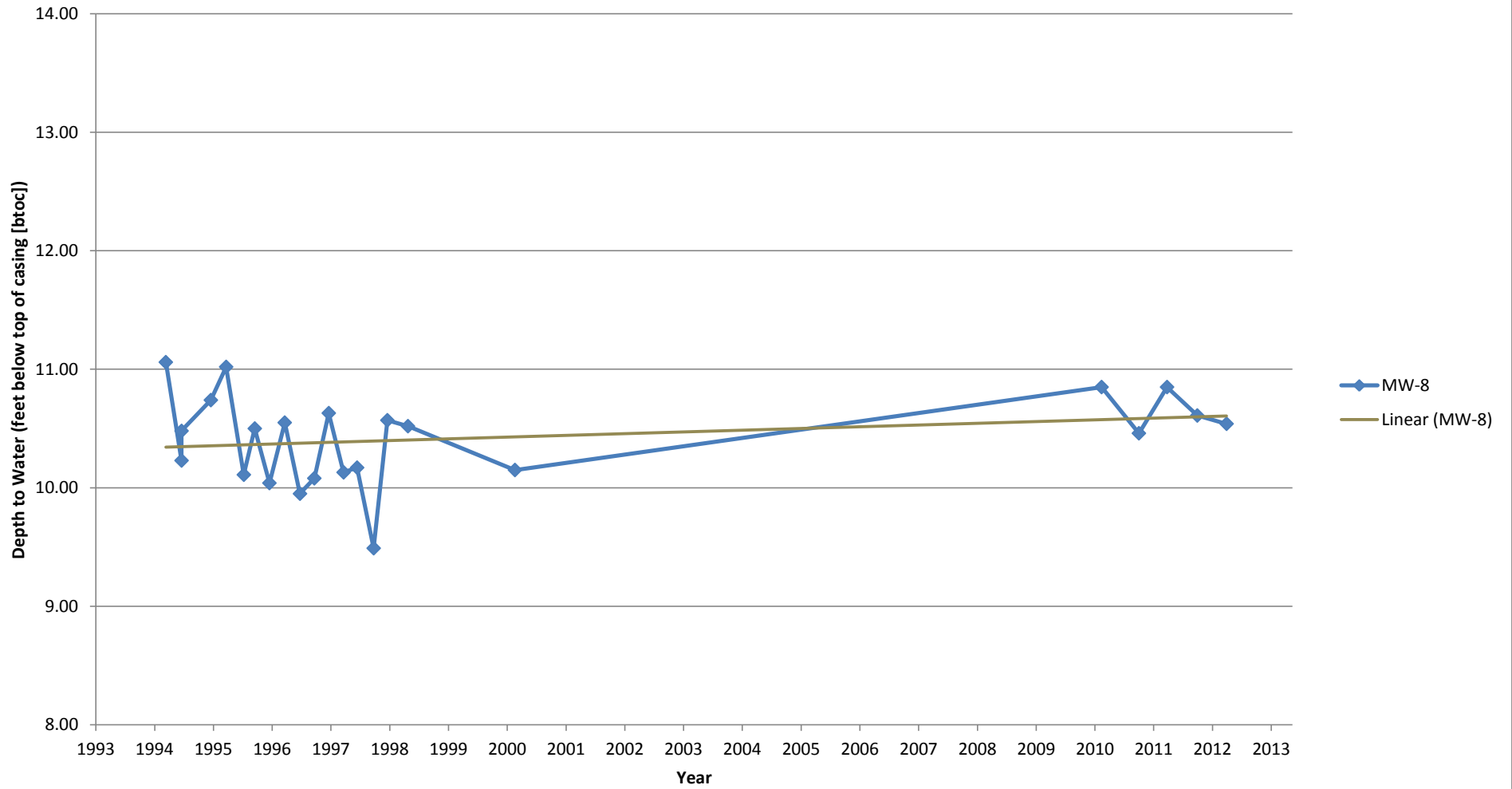
- $$Risk = 1.1 \times 10^{-5}$$

The estimated LECR for utility worker direct contact for COCs identified in the Policy is well within the range considered protective of human health for commercial site use. Furthermore, the LECR would likely be further reduced by site regulation provided by the IEGP requiring assessment of health and safety precautions prior to any significant subsurface work.

APPENDIX C

HISTORICAL DEPTH-TO-WATER MEASUREMENTS OVER TIME, WELL MW-8

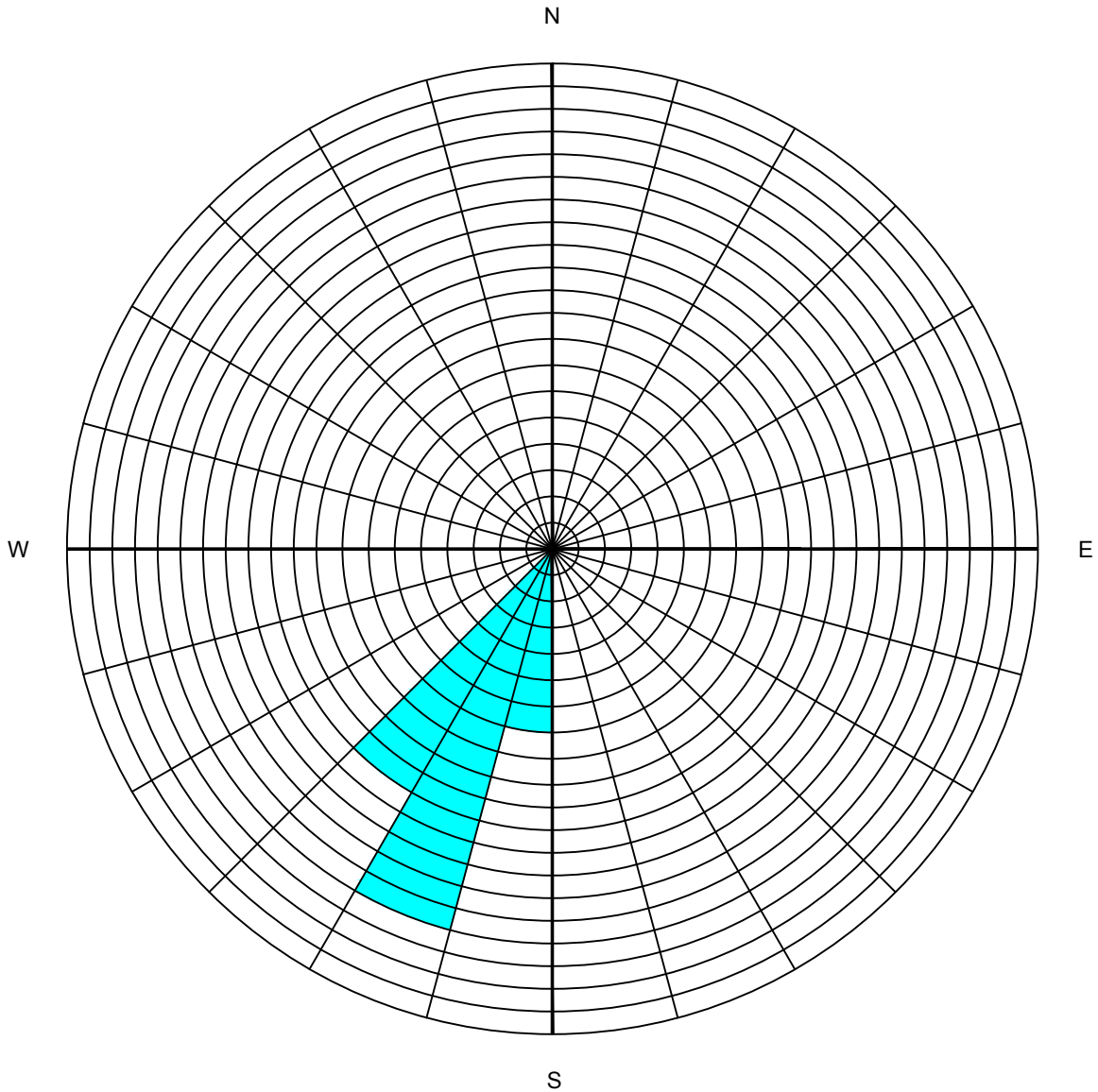
Depth-to-water Measurements at Well MW-8



APPENDIX D

ROSE DIAGRAM - HISTORICAL SHALLOW GROUNDWATER FLOW DIRECTION

ESTIMATED GROUNDWATER FLOW DIRECTION
February 1990 to November 2012



Each shaded area represents data from
one groundwater monitoring event

Flow direction interpreted from
groundwater elevation contour maps
presented in historical periodic
groundwater monitoring reports.



PES Environmental, Inc.
Engineering & Environmental Services

**Rose Diagram - Historical Shallow
Groundwater Flow Direction**
1650 65th Street
Emeryville, California

APPENDIX

D-1