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Alameda County  
Environmental Health

July 26, 2007

Ms. Steven Plunkett  
Hazardous Material Specialist  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Subject: UST Removal and Associated Soil Remediation Workplan  
387 Orange Street, Oakland, California (Fuel Leak Case No. RO0002921)

Dear Mr. Plunkett:

### **INTRODUCTION AND BACKGROUND**

On behalf of the property executor (Ms. Mary Kranz, executor of the Estate of David Ulibarri,), Stellar Environmental Solutions, Inc. (SES), is providing this workplan to the Alameda County Environmental Health Services (ACEH). The workplan was prepared to describe the planned activities associated with the combined UST and associated contaminated soil removal phase. SES submitted a May 31, 2007 investigation report to address the Alameda County Environmental Health Services (ACEHS) concerns about the subject property designated Fuel Leak case (No. RO0002921). The report showed significant concentrations (at 2,400 mg/L TPH-diesel) of hydrocarbons in the groundwater at a depth of about 25 feet below ground surface. Soil contamination appears to be directly beneath the estimated 1,000 gallon heating oil underground storage tank (UST). The results precluded the idea of leaving the UST in place—which would have been possible if there was no significant contamination discovered.

The ACEHS responded to the SES report with a letter dated July 16, 2007 requesting a workplan to remove the UST and mitigate the “soil and groundwater contamination.” However, because the groundwater is not accessible during this UST removal stage, the workplan and CO No. 2 only address the removal of the UST and associated accessible contaminated soil.

The groundwater is currently not accessible because its depth is far below the practical limits of the excavation. Following the UST and associated soil removal, the Site will be restored to its

original condition. This will include replacing a section of the sidewalk which will be impacted by the excavation work. SES also understands that the UST removal component of this workplan will be coordinated and permitted through the City of Oakland Fire Department and other City of Oakland entities such as the Public Works department for encroachment permits, and not ACEH. However, ACEH is interested in the evidence of subsurface contamination that is revealed as part of the UST removal project.

### **PROPOSED SCOPE OF WORK**

Project work elements proposed in this workplan include: 1) Pre-Field Work Planning and Permits; 2) UFST and Associated Soil Removal; 3) Laboratory Analyses; 4) Technical Report Preparation; and 5) Electronic Data Reporting

#### **Task 1 – Pre-Field Work Planning and Permits**

This task includes the cost to conduct all the pre-field work planning and permitting elements for the proposed borehole program, including the completion of the following four permits:

- Traffic Control Plan to be completed per the City of Oakland requirements;
- City of Oakland (Public Works) Excavation Permit;
- City of Oakland (Public Works) Obstruction Permit; and
- Oakland Fire Department UST Removal Permit and UST Contents Removal Permit. These permits also require figure development, form completions, and a Health and Safety Plan.

In addition to obtaining the permits, SES will complete the following as part of the pre-field work elements:

- Site Health and Safety Plan to be updated to reflect the UST removal and to be provided to the Fire Department as part of their UST removal application;
- Complete a site visit to mark drilling locations, then notify Underground Service Alert; and
- Provide neighborhood notifications, barricade the work area, and place placards for detouring on sidewalk.

## **Task 2 – UST and Associated Soil Removal**

The top of the UST is at approximately 10 feet below ground surface (bgs) and estimated at 4 feet in diameter, so the base of the UST is at about 14 feet bgs. Due site constraints, the excavator can only remove up to 16 feet bgs. During the excavation—approximated at a one day duration limit—there will be two traffic control flag-persons to control the traffic and allow for loading of the UST and soil haulers.

The basic scope of work to remove the UST and associated contaminated soil includes:

- Sawcutting, removal, and disposal of the overlying sidewalk;
- UST Removal (1 steel UST: 880 gallons) including exposing, line flushing, CO2 inerting, LEL/O2 check, and excavation soil sampling;
- Same day removal and transportation of the UST via hazardous waste manifest;
- Same day excavation and removal of petroleum hydrocarbon contaminated soil for offsite disposal;
- Delivering and importing backfill - Class 2;
- Backfilling with controlled density fill (to avoid having to do compaction testing per the city of Oakland requirements) and compacting the excavation (labor and equipment only); and
- Replacing the concrete sidewalk (following City of Oakland specifications).

The excavation will terminate at a depth of 16 feet or less which is dependant on sidewall stability. No shoring is planned as part of this excavation due to the significant additional expenses of about \$20,000 associated with shoring with the site constraints.

As part of documenting the soil contamination and for profiling the soil for offsite disposal, we anticipate collecting two soil samples. One of these samples will be collected from the overburden and one from beneath the UST. Samples will be securely sealed in appropriate containers, placed in an ice chest with ice at approximately 4 degrees C., and transported to the analytical laboratory under chain-of-custody record the same day they are collected. Our cost estimate assumes the work will be conducted in one 10-hour day (onsite time).

Waste soil from the drilling will be containerized in a labeled 55-gallon steel drum that will be temporarily stored onsite. As a cost-saving measure, we recommend and this proposal assumes, that sampling and disposal of this soil be postponed until it is known that no further drilling work is required (i.e. after groundwater monitoring well installation).

### **Task 3: Laboratory Analyses**

All soil and groundwater samples will be analyzed by a California-certified analytical laboratory. The analytical results will be performed at a standard turnaround (2 weeks). The previous ACEHS required analyses, including the Fuel oxygenates, lead scavengers, and Ethanol have been dropped because they were not detected in the previous analyses.

- Total extractable and volatile hydrocarbons – diesel and gas range (TPH-d, TPH-g) by EPA Method 8015M or 8260;
- Aromatic hydrocarbons - BTEX and MTBE by EPA Method 8260

### **Task 4 – Technical Report Preparation**

We will prepare a comprehensive technical documentation report that will discuss the UST and contaminated soil removal. Report elements will include:

- Summary of historical sampling and site characterization activities;
- Technical objectives of the UST and soil removal;
- Discussion of UST and soil removal protocols and methods;
- Discussion of confirmation sampling protocols and methods;
- Tabular summary of analytical results;
- Figure(s) showing UST and soil removal locations as well as sampling locations;
- Evaluation of site hydrogeologic and hydrochemical conditions;
- Discussion of analytical results in the context of contaminant distribution and meeting the heating oil UST closure criteria; and
- Technical appendices (e.g. lab reports, waste manifests, permits, photodocumentation, etc.)

The technical report will be signed by a California Registered Geologist. This task includes the cost to contact Alameda County Health and determine their schedule for review of the investigation results. We will prepare a total of 2 hard copies of the report (for you) and an electronic pdf copy for both you and the regulator.

### **Task 5 – Electronic Data Reporting**

The site is subject to the California Water Board's GeoTracker system requirements, for electronic uploads of investigation data and reports. SES will upload all information including

sampling results, sample diagrams, and technical reports for the UST and soil contamination removals.

The site is also subject to ACEHS's "ftp" system that requires electronic uploads of all technical reports to their system. We will make those uploads and provide notification to ACEH when they have been uploaded.


### **Task 6 –California Tank Fund Assistance (OPTIONAL)**

Based on the apparent regulatory compliance for the former UST, it appears that the site may be eligible for monetary reimbursement from the California Underground Storage Tank Cleanup Fund (Tank Fund). This task includes the cost to review local regulatory agency files to establish permit compliance, to answer any questions the Tank Fund may have, and submit a formal eligibility application. Eligibility review/application approval generally takes up to 6 months, before which reimbursement requests cannot be submitted. Therefore, the first reimbursement request would be submitted after the application is approved, under a separate change order.

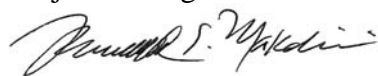
### **ESTIMATED SCHEDULE**

We will begin work immediately following our receipt of your concurrence. Please provide your approval as soon as possible as the field work should be conducted in the next month to keep the current bids and permitting viable. The scope items in this technical workplan will be implemented within one month following your notice-to-proceed, dependent upon turn-around time for permits approved by the City of Oakland. We will contact ACEH soon thereafter to determine the timeline for their review. The technical report will be submitted within approximately 3 weeks following the UST and contaminated soil removal. Thank you again for the review and approval of this workplan. Please call us directly at 510-644-3123 if you have any questions.

Sincerely,



Henry Pietropaoli, R.G., R.E.A.  
Project Manager



Richard S. Makdisi, R.G., R.E.A.  
Principal

