R2518

STELLAR ENVIRONMENTAL SOLUTIONS
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TRANSMITTAL MEMORANDUM

TO: **ALAMEDA COUNTY ENVIRONMENTAL HEALTH DEPARTMENT**
ENVIRONMENTAL PROTECTION
LOCAL OVERSIGHT PROGRAM
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502-6577

DATE: **APRIL 23, 2003**

Alameda County
APR 29 2003
Environmental Health

ATTENTION: **MR. DON HWANG**

FILE: **2002-55**

SUBJECT: **488 25TH STREET, OAKLAND, CA**
ACEH CASE NO. RO0002518

WE ARE SENDING: ☒ HEREWITH ☐ UNDER SEPARATE COVER

☐ VIA MAIL ☐ VIA

THE FOLLOWING: "WORKPLAN FOR SITE INVESTIGATION" (DATED 4/21/03)

☐ AS REQUESTED ☒ FOR YOUR APPROVAL

☐ FOR REVIEW ☐ FOR YOUR USE

☐ FOR SIGNATURE ☐ FOR YOUR FILES

COPIES TO: **MR. MIKE BENNER**
BENNER AUTO REPAIR, INC.

BY: Bruce Plenkey

★ **Stellar Environmental Solutions, Inc.**

2198 Sixth Street, Berkeley, CA 94710
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Geoscience & Engineering Consulting

April 21, 2003

Alameda County Health Care Services Agency
Environmental Health Services – Environmental Protection
Local Oversight Program
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Alameda County
APR 29 2003
Environmental Health

Attention: Mr. Don Hwang – Hazardous Materials Specialist

Subject: Workplan for Site Investigation
Benner Auto Repair Inc. Facility
488 25th Street, Oakland, California
Fuel Leak Case RO0002518

Dear Mr. Hwang:

INTRODUCTION AND BACKGROUND

Stellar Environmental Solutions, Inc. (SES) is submitting to the Alameda County Environmental Health (ACEH) this workplan for site investigation at the referenced site. Figure 1 shows the site location. This work will implement the activities requested in the April 2, 2003 ACEH letter to the property owner.

SES submitted to ACEH the SES January 2003 Gasoline Underground Storage Tank Removal Report that described the removal of one 1,000-gallon underground fuel storage tank (UFST) formerly containing gasoline. Figure 2 shows the former UFST location in relation to the building and adjacent street. The report concluded that:

- Gasoline-range hydrocarbons (2,500 mg/kg) were detected in soils directly beneath the former UFST (depth of 7 feet below grade).
- Neither BTEX nor MTBE were detected and lead was present at concentrations representative of background conditions.
- While groundwater was not encountered in the excavation, groundwater likely is present at a depth within several feet of the former UFST excavation base.

The ACEH letter requested a technical workplan to evaluate the extent and magnitude of groundwater and/or soil contamination associated with the former UFST.

PROPOSED SCOPE OF WORK

The proposed scope of work includes the following four tasks: 1) Pre-Field Work Planning; 2) Exploratory Borehole Installation and Sampling; 3) Laboratory Analyses; and 4) Report Preparation.

Task 1: Pre-Field Work Planning

SES will update the site-specific Health and Safety Plan to include the proposed drilling activities. We will apply for the requisite borehole drilling permit from Alameda County Public Works Agency, and we will notify Underground Service Alert of proposed drilling for their notification to utilities to mark any potential underground utilities. Work will not be conducted until ACEH approves this workplan.

Task 2: Borehole Installation and Sampling

We propose a phased approach to the investigation. The first phase will be exploratory borehole drilling and soil/groundwater sampling. The primary objectives of this investigation include:

- Determine if groundwater in the immediate vicinity of the former UFST has been impacted;
- Determine if capillary fringe soils in the immediate vicinity of the UFST have been impacted; and
- Determine the depth to groundwater and lithologic conditions in the immediate vicinity of the UFST.

These data will be used to evaluate if further action (i.e. installation and sampling of a groundwater monitoring well[s] is warranted).

The direction of shallow groundwater flow in the vicinity has not been determined. We infer that the sub-regional groundwater flow direction is to the west (toward San Francisco Bay), although local variations may occur. At a site directly to the south (477 25th Street), a groundwater monitoring well was installed to the south of a former UFST, suggesting that local groundwater flow direction may be to the south.

We propose to install and sample up to five (5) exploratory boreholes, including one on each side of the former UFST excavation (each within approximately 10 feet of the former excavation) and one through the approximate center of the former excavation. The boreholes to the east and west will be placed in the sidewalk. The borehole to the south will be placed in the street. The fourth borehole will be placed to the northwest, just inside the building's roll-up door (access directly to the north of the former UFST excavation is restricted by an interior room). The final borehole will be advanced through the center of the former UFST. Figure 2 shows the proposed borehole locations. Locating the boreholes on all sides of the former UFST excavation will ensure that local groundwater flow variations will be accommodated, and any offsite-sourced contamination will be identified.

The boreholes will be advanced with a Geoprobe™ (direct-push) or equivalent rig that advances approximately 2-inch diameter sampling rods to first occurrence of groundwater (likely between 10 and 15 feet below grade). Continuous core soil samples will be collected to allow for visual inspection of lithology (for geologic logging). One soil sample (likely from the capillary fringe) will be collected from each borehole for laboratory analysis. One grab-groundwater sample will then be collected from each borehole using new Tygon™ tubing connected to a vacuum pump. The sampling will be completed using a licensed (C-57) drilling contractor, to provide the sampling services under SES's direction. 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.

Waste soil from the borehole installations will be temporarily containerized onsite in labeled, 5-gallon plastic pails with sealing tops. This soil will be appropriately profiled and disposed of when it has been determined that no further waste soil will be generated, or will be combined with any future generated waste soil from subsequent investigation phases.

Task 3: Laboratory Analyses

A California-certified (ELAP) analytical laboratory will complete the laboratory analyses. The analytical results will be performed at a standard turnaround (2 weeks). All soil and groundwater samples will be analyzed for the following:

- Total volatile hydrocarbons – gasoline range (TVH-g) by modified EPA Method 8015; and
- BTEX and MTBE by EPA Method 8020.

Report Preparation

The methodology and findings of the investigation will be incorporated into a comprehensive documentation report that will contain the following elements:

- Investigation scope and objectives
- Summary of previous UFST removal activities and findings
- Sampling and analytical protocols used
- Hydrochemical data from the sample analyses
- Site map delineating borehole locations
- Site lithologic conditions including borehole geologic logs
- Discussion of the fate and transport mechanisms of the constituents of concern in the groundwater and their potential migrational pathways
- Conclusions and, where appropriate, recommendations
- Technical appendices

The project will be overseen by and the report will be signed by a California Registered Geologist.

ESTIMATED SCHEDULE

We estimate that the drilling will be conducted within two weeks following ACEH approval of this workplan. Analytical laboratory results will be completed on normal (10 working day) turnaround. The final report will be submitted within 2 weeks following receipt of analytical

results, and will be submitted within the ACEH-specified deadline of 60 days following ACEH approval of the workplan.

TEAM QUALIFICATIONS

Stellar Environmental Solutions, Inc. has completed dozens of similar projects, including several under the jurisdiction of ACEH. Our team will consist of the following:

- Stellar Environmental Solutions, Inc. (owner's consultant responsible for overall project coordination, geologic evaluation, sampling, data evaluation and report certification by a California Registered Geologist)
- Borehole installation driller with a current C-57 license
- Analytical laboratory with a current California ELAP certification

We trust that this submittal meets your agency needs. We request that ACEH provide to SES and the property owner written approval of this workplan. Please contact the undersigned directly if you have any questions.

Sincerely,

Bruce M. Rucker

REGISTERED GEOLOGIST
BRUCE M. RUCKER
No. 6814
Exp. 9/04
STATE OF CALIFORNIA

Bruce M. Rucker, R.G., R.E.A
Project Manager

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

Attachments: Location map and site plan with proposed borehole locations

cc: Mr. Mike Benner – Benner Auto Repair, Inc.

N

SITE LOCATION ON U.S.G.S. TOPOGRAPHIC MAP

488 25th Street
Oakland, CA

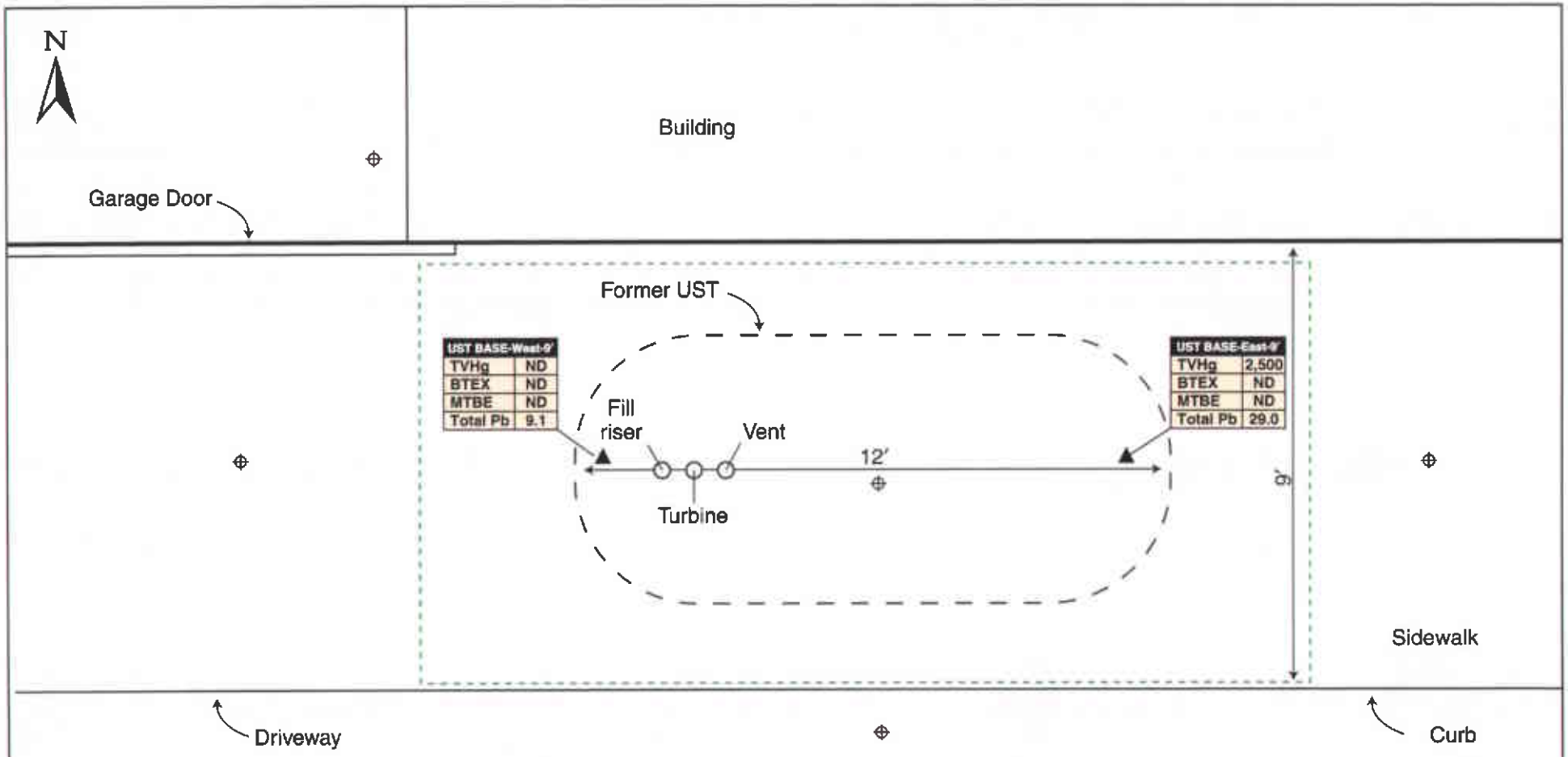
By: MJC | JANUARY 2003

Figure 1

★ Stellar Environmental Solutions

Geoscience & Engineering Consulting

2002-55-01



Stellar Environmental Solutions, Inc.
Geoscience & Engineering Consulting

PREVIOUS AND PROPOSED SAMPLING LOCATIONS—BENNER AUTOMOTIVE
488 25th Street, Oakland, CA

Figure 2

by: MJC | APRIL 2003

2002-55-03