

August 11, 1998

UST Local Oversight Program  
Alameda County Health Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

Attention: Ms. Eva Chu

Subject: Workplan to Conduct Soil Vapor Sampling  
187 North L Street UST Site  
Livermore, California  
GA 143-01-01

Ladies and Gentlemen:

Gribi Associates is pleased to submit this workplan on behalf of Mr. and Mrs. Tony Sullins to conduct soil vapor sampling at the 187 North L Street underground storage tank (UST) site in Livermore, California. Proposed sampling activities will include collecting soil vapor samples at two locations downgradient (west) from onsite well W-1s. The purpose of these activities will be to assess risk associated with possible hydrocarbon vapor inhalation at the site.

## **Vapor Sample Collection**

Two soil vapor samples will be collected at approximate locations shown on Figure 1. Each vapor sample will be collecting using the following method:

- A small hole will be cut in the concrete slab, exposing the underlying subgrade. Base rock will be removed, exposing native soils.
- An AMS Gas Vapor Probe will be driven approximately three feet below surface grade, and retracted to allow for vapor sampling.
- The vapor probe will be purged and a vapor sample will be collected using a six-liter, laboratory clean-certified Summa Canister™ supplied by Air Toxics, Ltd. The Summa Canister will be evacuated at the laboratory to about 29 inches of mercury (Hg) vacuum pressure, and, during sampling, the vacuum pressure will be lowered to about six inches Hg vacuum as soil vapors enters the Summa Canister. A flow controller calibrated and supplied by the analytical laboratory will be used to allow sampling over at least a one hour period.

- The vapor probe will be extracted, and the concrete slab will be patched to meet pre-existing conditions.
- The two vapor samples will be transported to the analytical laboratory under formal chain-of-custody.

### **Laboratory Analysis of Vapor Samples**

The two vapor samples will be analyzed for the following parameters with two-week turn around on results.

USEPA Method TO-14 Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)

This method provides for a benzene detection level of 0.300 ug/m<sup>3</sup>. Laboratory analysis will be conducted by Air Toxics, Ltd., a California-certified analytical laboratory.

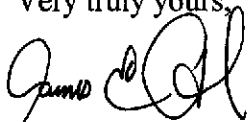
### **Report Preparation**

A report will be prepared for submittal to Alameda County Health Services Agency. This report will document vapor sampling methods and provide results of the investigation. In this report, soil vapor analytical results will be compared with the San Francisco Bay Regional Water Quality Control Board Draft Risk-Based Screening Levels for BTEX vapor at three feet below unpaved ground surface (commercial receptors) to assess potential risk of indoor vapor exposure at the site.

### **Project Schedule**

Subject to your approval, Gribi Associates is prepared to conduct vapor sampling activities within approximately one week, with a report to follow in approximately four weeks. We appreciate the opportunity to present this workplan for your review. Please call if you have questions or require additional information.

Very truly yours,



James E. Gribi  
Registered Geologist  
California No. 5843

JEG/ct  
Enclosure

c Mr. and Mrs. Tony Sullins

NORTH L STREET

UST

ARROW RENTALS BUILDING

PROPOSED VAPOR  
SAMPLE LOCATION

W-1s

FORMER USTS

FORMER USTS

W-Bs

**LEGEND**



- GROUNDWATER MONITORING WELL



- PROPOSED VAPOR SAMPLE LOCATION

0 15 30

APPROX. SCALE IN FEET



DESIGNED BY:

CHECKED BY:

DRAWN BY: JG

SCALE:

PROJECT NO: 143-01-01

**PROPOSED VAPOR SAMPLE  
LOCATIONS**

187 NORTH L STREET UST SITE  
LIVERMORE, CALIFORNIA

DATE: 08/11/98

FIGURE: 1

**GRIBI Associates**