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Mr. Larry Seto  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA , 94502-6540

August 18, 1999

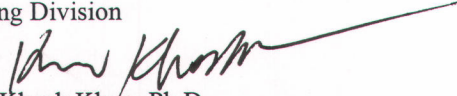
Re: 905 west Grand Avenue, Oakland, CA 94508

Dear Mr. Seto:

In response to you letter dated July 19, 1999, Delta Environmental Laboratories on behalf of Mr. William J .Perrie, property owner; 128 Dartmouth Place, Benicia, CA 94510, has prepared the requested subsurface investigation work plan in order to determine the vertical and horizontal extent of the hydrocarbons in the soil and groundwater. Please find attached a copy of the work plan and a map that shows the locations of the boreholes. As you see there are three locations and the forth location has been suggested as optional . The minimum three boreholes are needed in this investigation . The forth boreholes that is shown as optional is placed in the area where the forth tank has been removed. I would like to remove the forth location that is given as an optional from the work plan unless you believe it is necessary to get information from this location too.

Sincerely,

Delta Environmental Laboratories  
Consulting Division

  
Hossein Khosh Khoo, Ph.D.,  
Senior Scientist

Work Plan for Site Investigation  
905 West grand Avenue  
Oakland, CA

## 1. Introduction

Delta Environmental Laboratories, on behalf of Mr. William Parrie (the owner of the property), has prepared this work plan. The site is located at 905 west grand Avenue , Oakland, Alameda County, CA. The area is flat and zoned for commercial use.

The site is being used as Auto repair/ Mechanic shop currently. Three underground storage tanks, one 5000 gallons, one 6000 gallons and one 8000 gallons have been removed from the south of the site and one 250 gallons at the back of repair shop. The tanks at the south of the site contained water with contaminated hydrocarbons and the 250 gallon tank at the back of the repair shop contained waste oil.

## 2.0 Previous Activities

On February 2<sup>nd</sup>, 1999 American Construction company has removed the three storage tanks at south of the site and the 250 gallon tank from the back of repair shop. Sampling was conducted by Delta Environmental Labs supervision, and the locations of sampling determined by Mr. H. Gomez from Oakland fire prevention Bureau (county inspector). One water sample from each tank and one water sample from the center of the pit, under tank #2 was collected. Soil samples were collected from the north, east and west wall of the tanks located at south of the site and also from the center of the pit related to waste oil tank. All samples transferred to ice chest and packed on crushed ice and submitted to Delta Environmental Laboratories along with chain of custody for analysis. Delta is state certified Laboratory with ELAP certification # 1857

## 2.1 Water Analysis

The analysis of water samples collected from inside the tanks and from the center of the pit were analyzed for BTEX, TPH-g and Diesel and motor Oil .

The level of contamination in the water samples of the inside tanks were found to be in the following range:

Benzene:	1280 ug/L to 9430	ug/L
Toluene:	3360 ug/L to 47300	ug/L
Ethylbenzene:	1180 ug/L to 2890	ug/L
Xylene:	1180 ug/L to 27700	ug/L
TPH-g:	8470 ug/L to 170000	ug/L
Diesel	2630 ug/L to 18300	ug/L
Motor Oil:	460 ug/L to 1610	ug/L

## 2.2 Soil Analysis

The review of the laboratory results of soil samples indicate that BTEX and MTBE contamination were not detected with the exception that the sample collected from the north wall of tank #1 showed 21 ug/ kg xylene.

## 3.0 Scope of Work

The technical approach to this project is build upon the previous work. Four exploratory borings will be placed at the locations shown on figure 1. This approach will allow for a rapid reconnaissance of plume configuration extent. The data from these borings will be used to judge the need for any additional delineation subsurface conditions and need for monitoring wells.

### 3.1 Exploratory Borings

Drilling and well installation permit if needed, will be secured and a utility clearance will be performed prior to doing the field work. The boreholes will be drilled with Geoprobe truck mounted drilling equipment. All drilling equipment and sampling tools will be cleaned prior to arriving and before leaving the site. The augers will be advanced to the desired sampling depth interval. And a drive split spoon sampler will be driven a head of the drill bit. The sampler will then be received and disassembled and the soil filled brass liner will be sealed with Teflon paper or foil and plastic endcaps, labeled, logged onto chain-of-custody forms and place in a chilled ice chest. The boreholes will be logged using the Unified Soil Classification System under the supervision of a registered geologist. Additional Lithologic information will be collected to describe the subsurface geology. The samples will be collected at five foot intervals, at intervals of obvious contamination and at stratigraphic features of insert. Upon comparison of the borehole drillings and collection of water samples the boreholes will be backfilled with grout, placed from the bottom to top of the borehole.

### 3.2 Groundwater Sampling

Each exploratory boring will be sampled . The groundwater samples collected from the boreholes will be used for a rapid reconnaissance of the site groundwater contamination. A brief summary of these procedures follows: each borehole will be advanced into the aquifer and temporarily cased for sampling. Depth to groundwater measurement will be made to the nearest one-one hundredth of one foot and also checked for the presence of separate phase product. The water entering the borehole will be sampled using clean bailer and carefully poured into the appropriate laboratory prepared container with minimum cavitation. Each water sample will be labeled, logged onto a chain-of-custody form and placed in a chilled ice chest for transport to Delta.

### 4.0 Chemical Analysis

Delta will analyze the samples using EPA approved methods as follows:

BTEX; EPA 8020

MTBE; EPA 8260

TPH-g; 5030 GC/FID

TPH-Diesel; Motor oil EPA 8015M

Delta is a full service state certified laboratory (ELAP# 1857). Laboratory location is at 685 Stone Rd. #12, Benicia, CA 94510.

### 5. Report

A report of the findings of this site investigation will be prepared . The report will include the field method, permits, exploratory boring logs, monitoring well construction detail chemical analysis data and report narrative. The report will include estimates of contaminant extent, conclusions and recommendations for site cleanup if it is needed.

#### Schedule

Work plan

Submitted on 7/13/99

Sampling

7 days after receiving work plan approval

Analysis

ASAP

Report Production

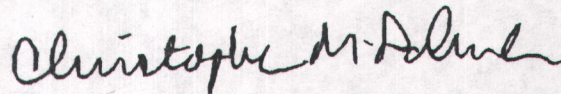
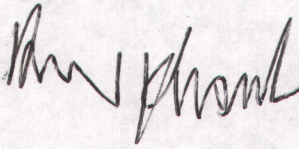
One week

Expected period for completing the project is twenty days after the approval of the work plan.

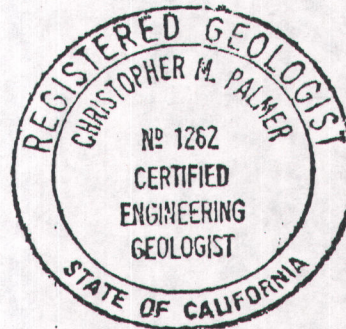
It will be appreciated if you review the work plan and advise whether any revision is necessary or not. If you should have any question, Please call Dr. Khosh Khoo at:  
1-800-747-6082.

Delta Environmental Laboratories, LLC  
Consulting Division

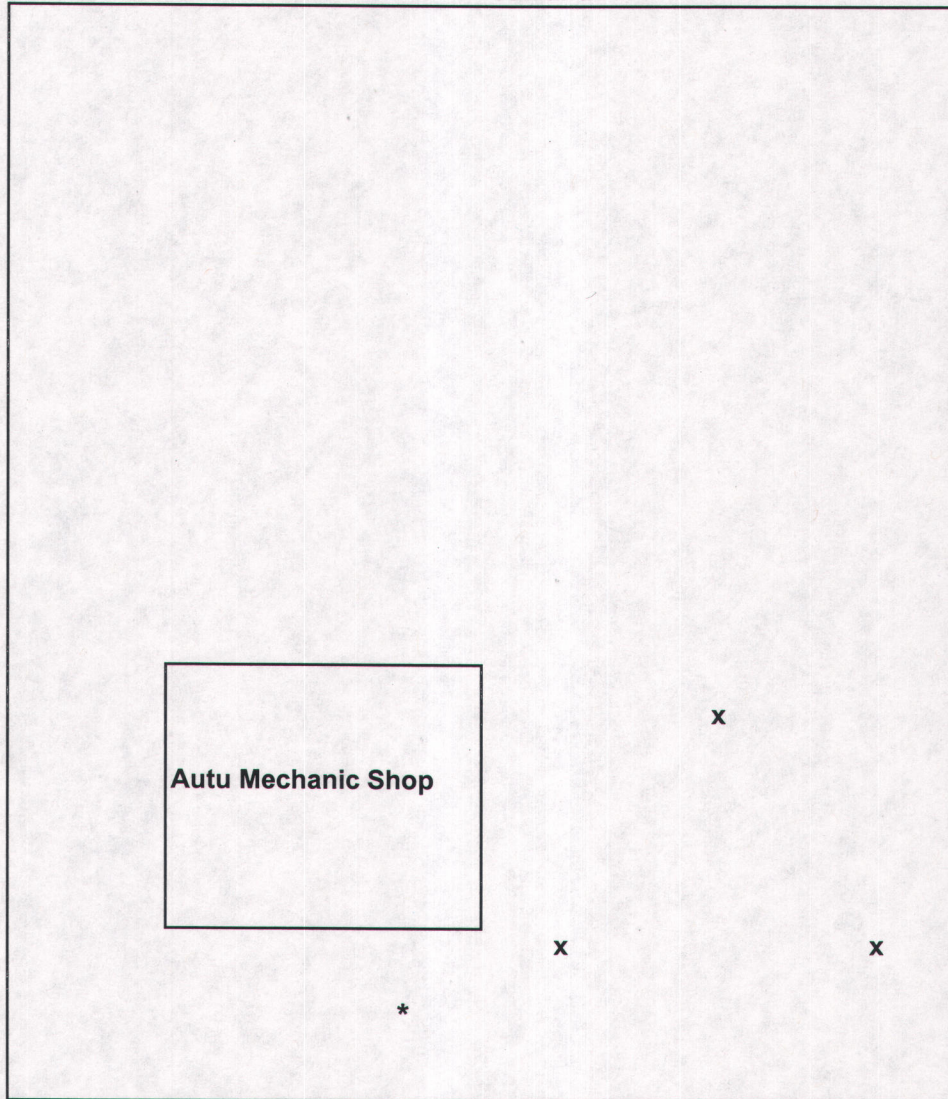
Hossein Khosh Khoo, Ph.D.,  
Senior Scientist



Christopher M. Palmer  
Hydrogeologist, HG246; C.E.G., 1262



905 West Grand Avenue  
Oakland



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Figure 1

x Locations proposed for boreholes  
\* Optional

# 905 West Grand Project

