

RO653

# ENVIRON

SKC 5906C

## FACSIMILE COVER LETTER

Contract Number: 03-7277A

Date: February 19, 1999

Total Number of Pages (including this cover page): 8/10

Confidential:

To: Susan Hugo

Company: Alameda County Health Care Services Agency

Location: Alameda

Fax Phone No.: 510-337-9335

From: Sara Dubowsky

Extension: 245

Time Transmitted: 3:45PM

Operator: Jmp

### Comments/Special Instructions:

Enclosed is a revised workplan which should include those comments discussed with Anne Gates yesterday. Please feel free to contact me at 510-655-7400 if you have any questions or comments regarding the plan.

X2517

*2/24/99  
talked to Sara Dubowsky  
- WP acceptable Jmp*

**PLEASE CALL IMMEDIATELY IF THE FAX YOU RECEIVE IS INCOMPLETE OR ILLEGIBLE**

A division of Pharmaceutical Product Development, Inc.

5820 Shellmound St., Suite 700 • Emeryville, California 94608-1954 • USA  
Tel: (510) 655-7400 • Fax: (510) 655-9517

*Site Spec*

**DRAFT**

February 19, 1999

*Via Facsimile and Federal Express*

Ms. Susan Hugo  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6700

Mr. Ron Gerber  
Emeryville Redevelopment Agency  
2200 Powell St, 12th floor  
Emeryville, Ca 94608

**Re: Revised Supplemental Sampling and Analysis Plan  
Former Standard Brands Paint Store and Former Emeryville Fire Station,  
Emeryville, California  
(ENVIRON Project No. 03-7277A)**

Dear Ms. Hugo and Mr. Gerber:

Enclosed please find a copy of the revised workplan to conduct a supplemental sampling and analysis program at the former Standard Brands Paint Store and the former Emeryville Fire Station in Emeryville, California ("the Site"). Included in this plan are provisions to collect soil-gas samples at two different depths per boring. In addition, a second sampling collection date may be established following inspection of the initial soil-gas results by ENVIRON and the Alameda County of Environmental Health Services (ACEHS). Assuming you concur with the scope of the plan, we have tentatively scheduled the sampling for the week of February 22, 1999. John Pekala of ENVIRON will be the supervising geologist at the Site and will be the on-site contact.

Please do not hesitate to contact us if you have any questions or comments. Thank you for your attention in this matter.

Sincerely,

**DRAFT**

Sara Dubowsky, M.H.S.  
Associate

**DRAFT**

Anne W. Gates, P.E.  
Manager

Enclosures 1

7.

**SUPPLEMENTAL SAMPLING AND  
ANALYSIS PLAN  
FORMER STANDARD BRANDS PAINT STORE AND  
FORMER EMERYVILLE FIRE STATION PROPERTIES  
EMERYVILLE, CALIFORNIA**

*Prepared for*

Emeryville Redevelopment Agency  
Emeryville, California

*Prepared by*

ENVIRON Corporation  
Emeryville, California

February 19, 1999  
Project No. 03-7277A

### TABLE OF CONTENTS

	<u>Page</u>
1.0 Introduction.....	1
2.0 Background And Purpose.....	1
3.0 Mobilization, Sample Locations And Depths.....	2
4.0 Sample Collection Methods.....	2
5.0 Sample Handling Procedures.....	3
6.0 Analytical Testing Program.....	3

### LIST OF FIGURES

- Figure 1 Site Location Map
- Figure 2 Proposed Sampling Locations

DRAFT

## 1.0 INTRODUCTION

ENVIRON Corporation ("ENVIRON") has prepared this supplemental sampling and analysis plan for the former Standard Brands Paint Store and the former Emeryville Fire Station, located in Emeryville, California ("the Site"). Under an existing contract with the City of Emeryville, ENVIRON Corporation ("ENVIRON") is currently performing a human health risk evaluation of several properties along San Pablo Avenue (adjacent to Pixar) for the purposes of obtaining closure from Alameda County. These properties are proposed for redevelopment as "urban" townhomes. Although prior risk evaluations have been performed on several of these properties, these risk evaluations did not consider a future residential use. In order to update the existing risk evaluations, we identified additional data needed to complete the evaluation and obtain site closure. This plan describes this additional work. Specifically, additional environmental samples need to be collected at the former Standard Brands Paint Store and former Emeryville Fire Station properties. The background and purpose of our additional data collection effort is described below followed by a description of the scope of this work.

## 2.0 BACKGROUND AND PURPOSE

At the former Standard Brands Paint Store property, McLaren/Hart performed a human health risk assessment in 1997 assuming that the property would be redeveloped for commercial purposes. Since the property is currently proposed to be redeveloped for residential purposes, many of the assumptions from McLaren/Hart's risk assessment are no longer applicable. McLaren/Hart's risk assessment focused on the potential risks to human health from the presence of naphthalene, a potential component of mineral spirits, in soil and groundwater at the site.

Due to the unknown composition of the mineral spirits mixture detected beneath the vacant building at the Site, there may be a large amount of uncertainty in the modeling of the chemical fate and transport used for risk assessment purposes. For example, estimates for the Henry's Law coefficient of mineral spirits, which represents the mixture's volatility, range over four orders of magnitude based on the assumptions used regarding the composition of the mixture. Furthermore, aging and weathering of the mineral spirits over time can also influence the volatility of the mixture, such that with enough time there may be only very low concentrations of volatiles present.

Considering all of these unknowns, the existing data may not be sufficient to reasonably conclude that the mineral spirits present at the Standard Brands property pose a *de minimis* risk to future onsite residents. Therefore, this sampling and analysis plan for the collection of soil gas samples is intended to assess the true volatility of the mixture currently at the Site. This information will then be used to accurately quantify risks and determine whether or not the levels of mineral spirits are acceptable for a future residential scenario. The scope of this data

DRAFT

collection effort is described in detail below.

At the former Emeryville Fire Station property, further characterization of petroleum hydrocarbons and methyl tertiary butyl ether (MTBE) in soil and ground water was requested by Susan Hugo of the Alameda County of Health Care Services (ACHCS). In addition, further information was requested regarding the presence of a former sump near the excavated underground storage tank (UST). Therefore, the purpose of ENVIRON's investigation at the Fire Station is to collect additional soil and groundwater data to address the ACEHS concerns and supplement our ongoing risk evaluation.

### 3.0 MOBILIZATION, SAMPLE LOCATIONS AND DEPTHS

Prior to initiating the field work, ENVIRON has obtained a permit from the Alameda County Public Works Agency (ACPWA), prepared a health and safety plan, coordinated and scheduled subcontractors, and obtained utility clearances.

ENVIRON proposes to install three temporary soil-gas probes at the Site to depths not greater than nine feet. The vacant Standard Brands Paint Store building was selected for soil gas sampling as previous investigations indicate that mineral spirits are primarily situated in this area. Two of the probes will be installed inside the existing building, and one of the probes will be installed in the adjacent vacant parcel to the south of the building. The vapor probe at the southern-most location is intended to further characterize the lateral extent of the mineral spirits as no mineral spirits data was previously collected in that area. Two soil gas samples will be collected at each probe location at approximate depths of four and eight feet below ground surface. The approximate locations of the vapor probes are presented on Figure 1. Following the review of these soil-gas sample results, it will be decided with Susan Hugo whether or not an additional day of soil-gas sampling is needed.

At the former Emeryville Fire Station, ENVIRON will install four direct push soil borings between 3 and 5 feet below ground surface, immediately adjacent to the former sump. One ground water sample will be collected from the southwest soil boring between 8 and 12 feet below ground surface. This location was selected as it is likely downgradient of the former sump and UST. An additional ground water sample will be collected from the existing ground water monitoring well MW-1 if the well is accessible. If the well is not accessible, a second ground water sample may be collected from an additional soil boring to be located in the vicinity of the well. The approximate soil and ground water sampling locations at the former Fire Station are presented on Figure 1.

### 4.0 SAMPLE COLLECTION METHODS

Sampling at the Site will be conducted by Precision Sampling, Inc. ("Precision") under the direct supervision of an ENVIRON geologist. Prior to conducting sampling, a health and safety meeting will be directed by the ENVIRON representative and attended by the Precision

**DRAFT**

sampling crew. Soil-gas probes and borings will be driven using the Enviro-Core Sampling System, a direct-push, hydraulically-driven coring system. The hydraulically-driven Enviro-Core Sampling System uses vibration, hydraulic hammer, or direct push methods to advance two nested sampling rods into undisturbed soils.

Soil-gas samples will be collected in an evacuated Summa canister at each probe location following purging of at least two volumes of the sampling tubing. Soil samples will be retrieved from undisturbed soil inside the inner of two sampling rods used in the Enviro-Core Sampling System. Water samples will be collected from the southwest boring by placing ¾ inch PVC piping into the direct push soil boring. The sample will then be extracted from a five foot screened section using a bailer. The monitoring well will be sampled using either a bailer or a pump. Both water samples will be collected after at least three well casing volumes have been purged. No duplicate or equipment blank sampling will be conducted. It is assumed that Level D personal protection equipment (PPE) will be worn by all personnel working at the Site, and upgrade to Level C or higher PPE will not be necessary.

## 5.0 SAMPLE HANDLING PROCEDURES

Decontamination of non-dedicated sampling equipment will be conducted by Precision prior to and in between collection of each sample. Decontamination of all reusable soil and ground water sampling equipment will consist of an Alconox wash, double rinse with de-ionized water, and a final steam cleaning. New tubing will be used for the collection of each vapor sample at each probe location. Tubing will not be reused for collection of samples at other probe locations. The vapor sampling equipment will be purged with zero air.

The soil gas samples will be transported by Federal Express to Environmental Analytical Services, Inc. (EAS) under chain-of-custody protocol for analysis. Laboratory personnel will compare the chain-of-custody record to the sample shipment for possible discrepancies.

The two ground water samples will each be collected in six 40 ml VOAs and capped with Teflon lined caps. For TPH diesel analysis each water sample will also be partitioned into two one liter amber bottles and capped with a plastic cap. Stainless steel tubing with Teflon caps will be used to collect each of the soil samples. All samples will be sealed in a plastic ziplock-type bag, placed in a cooler containing bagged ice, and transported by courier to Chromalab, Inc. in Pleasanton, California under chain-of-custody protocol for analysis. Laboratory personnel will compare the chain-of-custody record to the sample shipment for possible discrepancies.

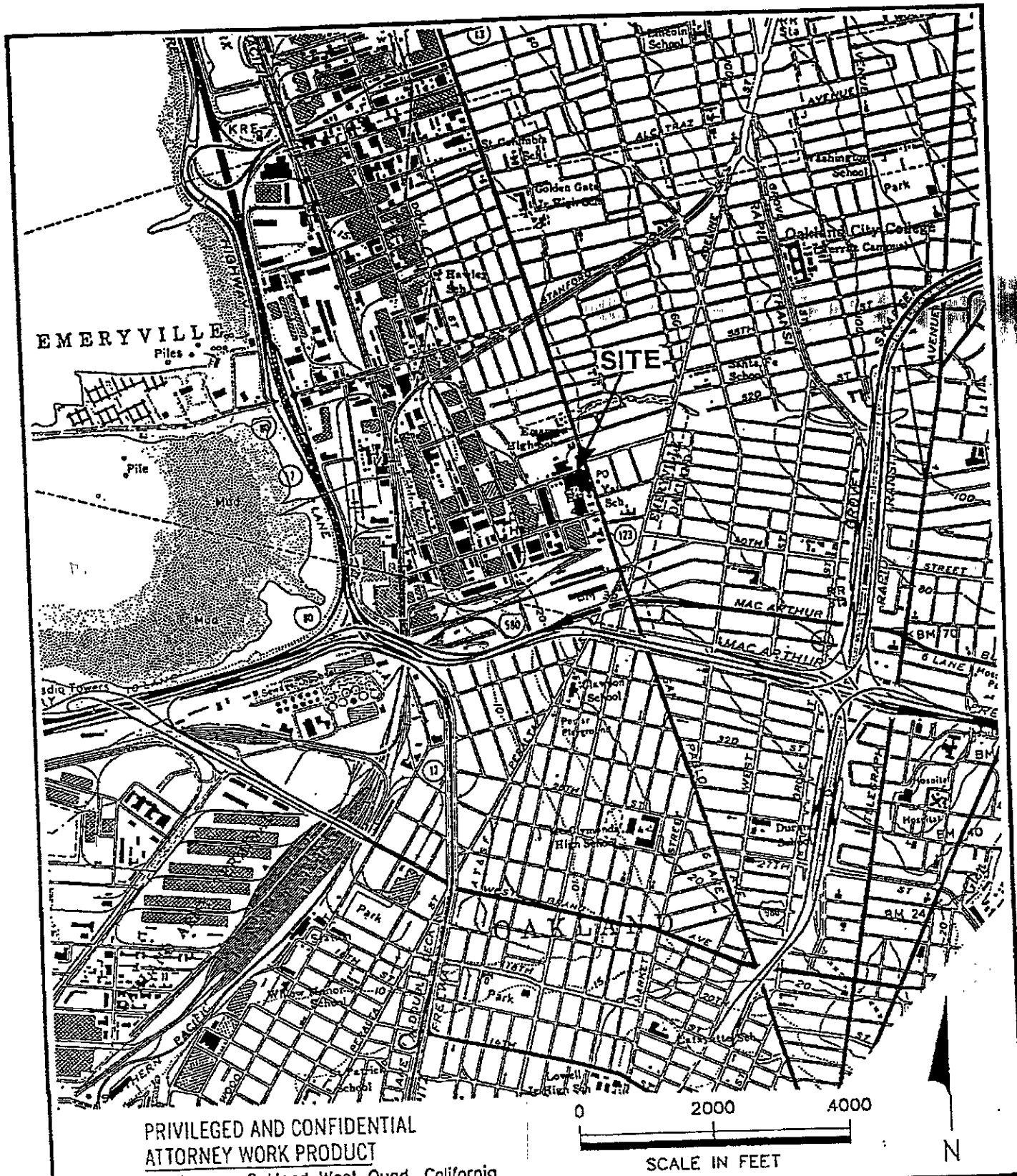
## 6.0 ANALYTICAL TESTING PROGRAM

All soil-gas samples will be analyzed at EAS with a 7-day turn-around time. The samples will be analyzed for Total Petroleum Hydrocarbons (TPH) as mineral spirits; hexane; and benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method TO-14. Depending on analytical results, further speciation analyses of compounds may be requested.

**DRAFT**

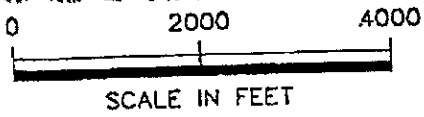
All ground water and soil samples will be analyzed at Chromalab, Inc., a state certified laboratory (ELAP Certificate Number 1094) on a 5-day turn-around time. The samples will be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline, diesel, and motor oil; benzene, toluene, ethylbenzene, and xylene (BTEX), and methyl tertiary butyl ether (MTBE) using EPA Methods 3550/5030/8015/8020.





PRIVILEGED AND CONFIDENTIAL  
ATTORNEY WORK PRODUCT

Source: USGS map, Oakland West Quad, California



N

**ENVIRON**  
Counsel in Health and Environmental Science

Site Location Map  
Standard Brands Paint  
Emeryville, California

Figure  
1

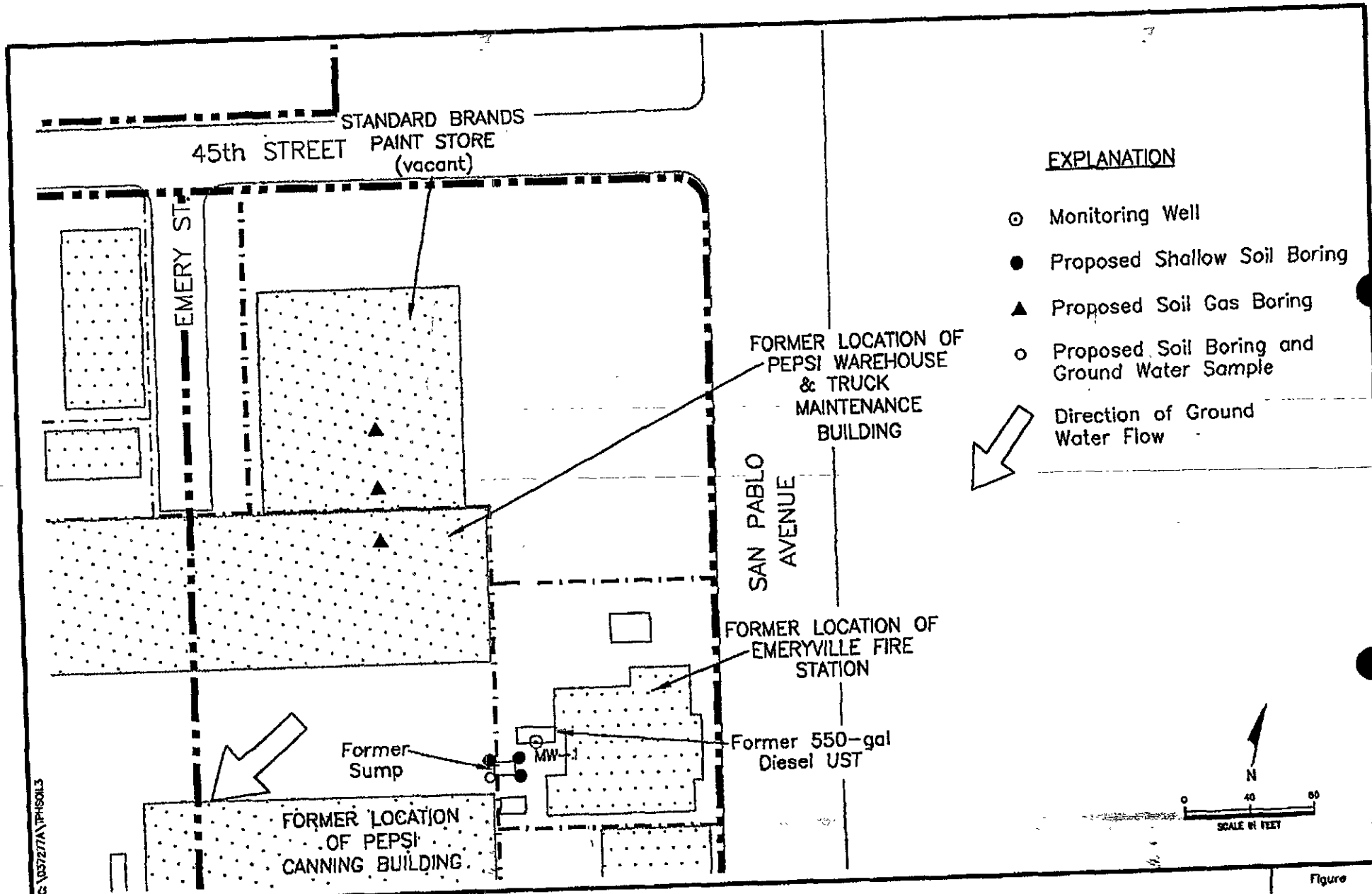
Drafter: RS

Date: 7/27/95

Contract Number: 03-46030

Approved:

Revised:



**EXPLANATION**

- ⊙ Monitoring Well
  - Proposed Shallow Soil Boring
  - ▲ Proposed Soil Gas Boring
  - Proposed Soil Boring and Ground Water Sample
- ➔ Direction of Ground Water Flow

C:\037277A\PHS013

**ENVIRON**

6001 Shellmound St., Suite 700, Emeryville, CA 94608

Proposed Sampling Locations  
 Proposed Emeryville Village Center  
 Emeryville, California

Drafter: RS      Date: 2/19/99      Contract Number: 03-7277A

Approved: \_\_\_\_\_ Revised: \_\_\_\_\_

Figure  
**2**