

FUGRO WEST, INC.

ENVIRONMENTAL
PROTECTION

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April 10, 1995
Project No. 9437-7623

44 Montgomery Street, Suite 1010
San Francisco, CA 94104
Tel: (415) 296-1041
Fax: (415) 296-0944

Ms. Eva Chu
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

**Proposed Soil Vapor Extraction
Alameda Housing Authority Site
1916 Webster Street
Alameda, California**

Dear Ms. Chu,

This letter describes details of the proposed soil vapor extraction (SVE) system at the Alameda Housing Authority site located at 1916 Webster Street in Alameda, California (Subject Property). The use of SVE as a remedial option to address the presence of petroleum hydrocarbons in soil at the Subject Property was proposed in the Revised Corrective Action Plan (RCAP), dated November 9, 1994, prepared by Fugro West, Inc. (Fugro).

In the RCAP, Fugro proposed to install and utilize two SVE wells at the Subject Property, one south of the former underground storage tank (UST) cavity, and one east of the former UST cavity (Figure 1). After further review of available site data, Fugro proposes to install both of the SVE system wells south of the former UST cavity. The wells will be located inside the existing site building. Well SVE-1 will be installed approximately 20 feet south of the former UST cavity, and is intended to function as the primary vapor extraction well. Well SVE-2 will be installed approximately 20 feet south of well SVE-1, and will be used to assess the effectiveness of vapor extraction from well SVE-1. Both wells will also act as additional upgradient groundwater monitoring wells.

The proposed location of well SVE-1 is expected to enable remediation of the limited area of known soil contamination south of the former UST cavity, including soil beneath the building. When a vacuum is applied to well SVE-1, it is likely that the area of vacuum influence will be significantly influenced by the peagravel backfill in the former UST cavity. Air drawn from the backfill area to well SVE-1 will pass through and entrain hydrocarbon vapors from the area of known contamination. In addition, pumping of groundwater from monitoring well MW-4 will lower the water table and expose additional impacted soil to vapor flow.

The actual area of influence will be calculated using data from an SVE pilot test to be performed following well installation. During the pilot test, a vacuum will be applied to well SVE-1. Flow rates and effluent gas concentrations will be measured using a flow meter and a portable photoionization detector (PID). Induced vacuum at SVE-2 and other wells will be measured using pressure gauges. Additional details regarding the SVE pilot test, and other details of soil and groundwater remediation at the Subject Property, are included in the RCAP.

1916 Webster Street
Project No. 9437-7623
April 10, 1995



If you have any questions concerning the contents of this correspondence, or if you need additional information, please contact us at (415) 296-1041.

Sincerely,

FUGRO WEST, INC.

A handwritten signature in black ink, appearing to read "W. E. Bassett, Jr." with a stylized flourish at the end.

William E. Bassett, Jr.
Environmental Scientist

A handwritten signature in black ink, appearing to read "S. J. Boudreau" with a stylized flourish at the end.

Stephen J. Boudreau
Regional Branch Manager
Senior Environmental Engineer

cc: Ms. Sasha George, Alameda Housing Authority

WEB:dlb

WEBSTER STREET

(City Of Alameda Housing Authority)
1916 Webster Street

Building

Canopy

ATLANTIC AVENUE

MW-6

SVE-2
SVE-1

MW-4

MW-3

MW-1

Former
Excavation
Pit

MW-5

MW-2

Proposed Vapor Extraction Piping

Proposed Vapor /
Groundwater Treatment System

LEGEND



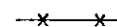
Groundwater Monitoring Well



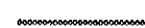
Proposed Vapor Extraction Well



Proposed Vapor Monitoring Well



Fence



Casing For Vapor Extraction System



Horizontal Vapor Extraction Well

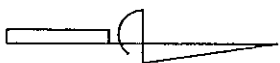


Casing For Groundwater Extraction System

NOTES

Site Sketch After Map
By Ron Archer, Civil Engineer, Inc.

All Locations Are Approximate



0 50 100
Approximate Scale In Feet

	DRAWN BY: D. Hada	PROPOSED VAPOR EXTRACTION SYSTEM	FIGURE 1
	DATE: November 2, 1994		
	REVISED BY: D. Hada	Alameda Housing 1916 Webster Street Alameda, CA	PROJECT NUMBER: 94-37-7623
	DATE: April 3, 1995		