

**Subsurface Consultants, Inc.**

**RECEIVED**

10:13 am, Apr 16, 2008

Alameda County  
Environmental Health

R. William Rudolph, P.E.  
President

September 3, 1998  
SCI 1115.002

Mr. Michael Covarrubias  
The Martin Group  
100 Bush Street, 26th Floor  
San Francisco, California 94104

**Summary of Environmental Investigations  
EmeryBay II Apartments  
Emeryville, California**

Dear Mr. Covarrubias:

Subsurface Consultants, Inc. (SCI) has prepared this letter at your request to summarize the status of previous and current environmental investigation activities at the EmeryBay II Apartments (the Site) in Emeryville. It is SCI's understanding that the City of Emeryville (City) will be issuing revenue refunding bonds for the Site, and that this summary is needed as part of the issuance of those bonds.

**BACKGROUND**

The Site is bordered on the north by 65th Street; to the east by Bay Street; to the south by 64th Street; and to the west by the first phase of the EmeryBay Apartments (EmeryBay I), which were constructed in 1986. Construction of the EmeryBay II Apartments was completed in 1994. Previous uses of the Site date back to the late 1800s when the southern portion of the Site was first developed on fill materials placed over tidal wetlands. The northern portion of the Site, as well as the adjacent EmeryBay I property, were filled during the 1940s and 1950s. Prior to landfilling in the Site area, the shoreline of San Francisco Bay extended eastward to approximately Bay Street. Previous uses of the Site included a meat packing plant and an envelope manufacturing company in the southern part of the Site, and trucking companies in the northern part of the Site.

Numerous environmental investigations and remedial actions have been conducted at the EmeryBay I and II properties by various consultants since at least the mid-1980s. A list of previous technical reports and correspondence pertaining to the Site and/or the adjacent EmeryBay I property is attached. The following paragraphs summarize the investigation and remediation activities conducted at the Site.

Mr. Michael Covarrubias  
The Martin Group  
September 3, 1998  
SCI 1115.002  
Page 2

## **UNDERGROUND FUEL STORAGE TANK REMOVALS**

The trucking companies that previously occupied the northern part of the Site and adjacent EmeryBay I property used 11 underground fuel storage tanks (USTs). The USTs were located on the EmeryBay I property, west of the EmeryBay II property boundary. The USTs were removed in 1986. SCI is aware of no former USTs in the southern part of the Site. An aboveground tank that held ethyl alcohol was removed from the envelope manufacturing plant site in approximately 1989.

## **SOIL AND GROUNDWATER INVESTIGATIONS**

Between approximately 1985 and 1989, Earth Metrics, Inc. (EMI) and Groundwater Technology, Inc. conducted soil and groundwater investigations at the EmeryBay I site, as well as on the northern part of the EmeryBay II property, under the direction of the Alameda County Health Care Services Agency, Hazardous Materials Division (County). Results of those investigations indicated the presence of some elevated concentrations of metals, petroleum hydrocarbons, and chlorinated hydrocarbons in soils and/or groundwater, as well as some pockets of methane gas and other odorous materials. A relatively small area of separate-phase petroleum hydrocarbon product was also found in the vicinity of the former UST area on the EmeryBay I site. Five groundwater monitoring wells and one groundwater extraction well installed during those investigations are still in place at the EmeryBay I site.

Between 1989 and 1992, Harding Lawson Associates (HLA) conducted soil and groundwater investigations on the EmeryBay II site. Results of those studies indicated elevated concentrations of several metals (primarily lead) in soil, as well as some petroleum hydrocarbons in soil and groundwater. Monitoring wells installed by HLA on the EmeryBay II site were properly abandoned prior to construction of the apartments.

## **REMEDIAL ACTIVITIES**

Soil and groundwater remediation activities at the EmeryBay I site were described in a work plan prepared by EMI and approved by the County. It is SCI's understanding that hydrocarbon-containing soils excavated in 1986 during construction of the EmeryBay I Apartments were either aerated or bioremediated onsite; some of these soils were placed on the EmeryBay II site and covered with asphalt pavement until the Phase II apartments were constructed. Extraction and treatment of separate-phase product and groundwater was also performed for several years at the EmeryBay I site; it is SCI's understanding that groundwater treatment ceased in approximately 1991.

Mr. Michael Covarrubias  
The Martin Group  
September 3, 1998  
SCI 1115.002  
Page 3

Remediation activities at the EmeryBay II site were conducted under the direction of the California Department of Toxic Substances Control (DTSC). As required by DTSC, a Hazardous Waste Management Plan (HWMP) was prepared by HLA in 1992. The HWMP, which was approved by DTSC on July 29, 1992, addressed the following remediation activities at the EmeryBay II site:

- Monitoring construction activities to protect worker health and safety with respect to hazardous materials,
- Capping of hydrocarbon-containing fill material beneath structures and pavements, and
- Continued groundwater monitoring.

A Human Health and Environmental Threat Assessment was also conducted by HLA and presented in the HWMP.

HLA presented the results of its services during construction of the EmeryBay II Apartments in a report dated May 19, 1994. Because of subsurface hydrocarbon vapors encountered in the northern part of the Site during drilling and trenching activities, HLA designed a passive soil-venting system that was installed, with DTSC's approval, during construction of the concrete slab for the ground floor parking garage. The soil-venting system consists of perforated PVC vent lines embedded in a layer of permeable drainrock placed above the low-permeability subgrade and below the low-permeability concrete foundation. The vent lines extend beneath the northern portion of the parking garage, and terminate within several vault boxes along the western side of the EmeryBay II building, where the pipes are capped.

#### **CURRENT ACTIVITIES**

To assess current conditions at the EmeryBay I and II sites, SCI recently conducted the following activities:

- Sampling and chemical analysis of groundwater samples from wells on the EmeryBay I site,
- Measurement of hydrocarbon vapors in the soil-venting lines at the EmeryBay II site, and
- Sampling and chemical analysis of ambient air samples within the parking garages of both the EmeryBay I and II sites.

Results of groundwater sampling and analyses generally indicated similar concentrations of petroleum hydrocarbons in groundwater beneath the EmeryBay I site, as compared to previous

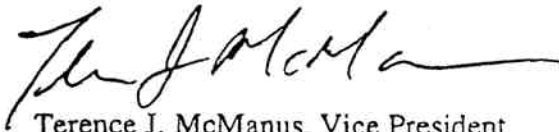
Mr. Michael Covarrubias  
The Martin Group  
September 3, 1998  
SCI 1115.002  
Page 4

monitoring events. Some petroleum hydrocarbon vapors were also found to be present within the soil-venting lines at the EmeryBay II site. Results of analyses on ambient air samples, however, revealed either no detectable or very low concentrations of petroleum hydrocarbons within the parking garages. SCI is currently preparing a report with the scope and findings of these activities. We anticipate that our report will be submitted to the County and possibly the California Regional Water Quality Control Board (RWQCB) for review. The County and RWQCB are the primary regulatory agencies that are working with the City to develop and implement a risk-based approach for managing groundwater quality issues in Emeryville. In our opinion, it is likely that the County and/or RWQCB will require no further action at the Site, with the possible exception of continued groundwater monitoring, and/or the treatment of hydrocarbon vapors accumulating within the soil-venting system with the use of granular activated carbon.

We trust that this provides the information you requested. If you have any questions, please call.

Yours very truly,

Subsurface Consultants, Inc.



Terence J. McManus, Vice President  
Principal Environmental Scientist

TJM:tm 1115.002\Summary.doc

Attachment: Previous Technical Reports and Correspondence

**Previous Technical Reports and Correspondence  
EmeryBay II Apartments  
Emeryville, California**

- Alameda County Hazardous Materials Division, June 9, 1987, letter from Mr. Rafat Shahid to Mr. Walter Kaczmarek of the Martin Company.
- California EPA, Department of Toxic Substances Control, June 22, 1990, Interim Guidance for Preparation of a Preliminary Endangerment Assessment Report.
- California EPA, DTSC, letter dated December 23, 1991, from Ms. Annina Antonio to Mr. Ignacio Dayrit of the City of Emeryville.
- California EPA, DTSC, letter dated July 29, 1992, from Mr. Donald Cox to Mr. Michael Covarrubias of the Martin Group.
- Department of Health Services (DHS), June 22, 1990, Interim Guidance for Preparation of a Preliminary Endangerment Assessment Report, State of California
- Earth Metrics, Inc., March 14, 1986, Draft Soils Contamination Characterization Plan for Garrett Freight Lines Emeryville Site, 64th Street and Lacoste, Emeryville, California.
- Earth Metrics, Inc., August 20, 1986, Soils and Groundwater Contamination Characterization of Bay Center Site in Emeryville, California.
- Groundwater Technology, Inc., March 17, 1987, Subsurface Hydrocarbon Investigation, Bay Center Project, Emeryville, California.
- Groundwater Technology, Inc., August 19, 1987, letter from Ms. Kelly Kline and Joyce Miley to Mr. Rafat Shahid of Alameda County Hazardous Materials Division.
- Groundwater Technology, Inc., September 8, 1987, Report of Further Subsurface Hydrocarbon Investigation, Emeryville, California, Bay Center Project.
- Groundwater Technology, Inc., June 1989, Well Replacement and Groundwater Assessment Report, Bay Center Project, Emeryville, California.
- Groundwater Technology, Inc., April 1991, Quarterly Status Report, Bay Center Project, Christie Avenue and 64th Street, Emeryville, California.
- GSF Energy, Inc., October 9, 1986, Results of the Gas Emissions Test of the Bay Center Construction Site.
- GSF Energy, Inc., March 3, 1987, Assessment of Gas Emissions at the Bay Center Apartments Site.
- Harding Lawson Associates, December 28, 1989, Preliminary Hazardous Materials Site Assessment, Parcels 4-2 and 4-3, Emeryville, California (HLA Job No. 2421,010.03).
- Harding Lawson Associates, October 26, 1990, Hazardous Materials Investigation/ Demolition Monitoring, Transo/LaCoste Site, Emeryville, California (HLA Job No. 2421,014.03).
- Harding Lawson Associates, June 19, 1991, Results of First Quarterly and Annual Groundwater Monitoring, 1991, Transo/LaCoste Site (Parcels 4-2 and 4-3), Emeryville, California (HLA Job No. 2421,021.03).
- Harding Lawson Associates, December 16, 1991, Preliminary Hazardous Materials Assessment, 1.5-acre portion of the Bay Center Project (HLA Job No. 18942,011.03).
- Harding Lawson Associates, May 4, 1992, Results of Groundwater Monitoring, Transo/LaCoste Site, Emeryville, California (HLA job No. 2421,021.03).

**Previous Technical Reports and Correspondence  
EmeryBay II Apartments  
Emeryville, California**

Harding Lawson Associates, May 6, 1992, Soil and Groundwater Investigation, 1.5-Acre Parcel, Emeryville, California (HLA Job No. 18942,013.03).

Harding Lawson Associates, May 26, 1992, Hazardous Waste Management Plan, EmeryBay Apartments, Emeryville, California (HLA Job No. 18942,014.03).

Harding Lawson Associates, November 24, 1992, Conceptual Design of Venting System, EmeryBay II Apartments, Emeryville, California (HLA Job No. 11505.015).

Harding Lawson Associates, April 21, 1993, letter from Mr. Terence McManus to Mr. Bruce Lapore of the East Bay Municipal Utilities District (HLA Job No. 11505.015).

The Martin Company, March 30, 1987, letter from Mr. Walter Kaczmarek to Mr. Lowell Miller of the Alameda County Hazardous Materials Division.

The Martin Company, July 2, 1987, letter from Mr. Walter Kaczmarek to Mr. Rafat Shahid of the Alameda County Hazardous Materials Division.

McLaren Hart, April 18, 1989, letter from Dr. Pat Sheehan to Mr. Walter Kaczmarek of the Martin Company.