

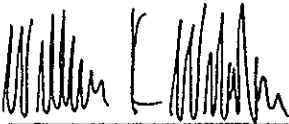
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PRELIMINARY ENVIRONMENTAL ASSESSMENT
PHASE 1
CITY OF EMERYVILLE
EMERYVILLE SENIOR HOUSING PROJECT
4300-4322 SAN PABLO AVENUE
EMERYVILLE, CALIFORNIA
SCI 537.002

Prepared for:

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December 4, 1989

I INTRODUCTION

This report records results of our Phase 1 Preliminary Environmental Assessment of the proposed Emeryville Senior Housing Project site in Emeryville, California. The site is located at 4300-4328 San Pablo Avenue, as shown on the Site Plan, Plate 1. We previously presented the results of a preliminary contamination assessment of a former car repair facility at 4320 San Pablo Avenue in a letter dated January 9, 1989.

The site is currently occupied by a self-service car wash, a post office, unoccupied houses and garages, and parking areas.

As outlined in our Agreement dated October 6, 1989, our assessment was conducted to evaluate the likelihood of on-site and off-premises sources of hazardous materials which have the potential to affect soil and groundwater at the site. In general, our services consisted of:

1. Reviewing available city, county and agency maps, files and records,
2. Reviewing available historical aerial photographs,
3. Discussing existing hazardous materials uses/problems in the area with regulatory agencies, and
4. Performing a field reconnaissance.

Soil and groundwater sampling and analyses were not performed during this study.

II SITE RECONNAISSANCE

A. Regional Geology

The site is located on a broad alluvial plain bordered by the Berkeley Hills to the east and San Francisco Bay to the west. According to a geologic map by Radbruch, (1957)¹, the site is underlain by the Temescal formation, which is an alluvial fan deposit comprised of interfingered lenses of clayey gravel, sandy silty clay and sand-clay-silt mixtures. The historical alignment of Temescal Creek is about 1000 feet north of the site.

B. Site Description

The relatively level, "L"-shaped site measures about 360 by 200 feet (in its longest and widest dimensions). It is bordered on the west by San Pablo Avenue, on the south by 43rd Street, and to the north and east by an office building, residences and the Veterans Memorial Building.

The site presently contains a self-serve car wash facility, the Emeryville Post Office, unoccupied houses and garages, and parking areas. Vegetation at the site consists mostly of sparse grasses and bushes.

¹ "Areal and Engineering Geology of the Oakland West Quadrangle, California," Miscellaneous Geological Investigation Map I-239, by Dorothy H. Radbruch, 1957.

III SITE USAGE HISTORY

We researched past use of the site and neighboring parcels by reviewing and/or contacting the following sources:

1. Sanborn Fire Insurance Maps,
2. Historical telephone directories,
3. City of Emeryville Fire Prevention Department,
4. Building plans and permits, and
5. Aerial photographs.²

The site consists of four lots with the addresses of 4300, 4310, 4320-4322, and 4326-4328 San Pablo Avenue. The historic use of each lot is detailed in the Appendix and summarized in the following paragraphs.

4300 San Pablo Avenue - The 1903 and 1911 Sanborn Maps show this lot to be vacant. The 1947 and 1959 aerial photographs and the 1950 Sanborn Map show a gasoline station on the lot. The 1959 aerial photographs show a different structure configuration, indicating that the station may have been remodeled or replaced. Historic telephone directories show that the gasoline station was in operation from about 1930 to 1966. By 1969, the directories indicate that the currently existing car wash was in operation.

² Pacific Aerial Surveys Photographs, AV-11-05-14 (1947), AV-337-07-23/24 (1959), AV-995-04-19 (1971), and AV-1377-06-18/19 (1977).

The 1971 and 1977 aerial photographs show the car wash structure to be the same as currently exists.

4310 San Pablo Avenue - The 1903 and 1911 Sanborn Maps show this lot to be vacant. The 1947 and 1959 aerial photographs show a post office structure on the lot. The 1971 aerial photograph shows that the post office structure had been enlarged to its present configuration.

4320-4322 San Pablo Avenue - The 1903 and 1911 Sanborn Maps show only the two current dwellings on this lot. The 1947 aerial photograph shows appurtenant structures had been added to the lot. The 1950 Sanborn Map shows that at least one of the appurtenant structures contained an auto repair facility. Historic telephone directories indicate that this facility was in operation from about 1941 until 1954. The lot is currently fenced and the structures are unoccupied.

4326-4328 San Pablo Avenue - The 1903 Sanborn Map shows this lot to be vacant. The 1911 Sanborn Map shows that a dwelling had been constructed on this lot and that an auto repair facility existed on the adjacent (offsite) lot to the north (4330 San Pablo Avenue). The 1947 aerial photograph shows that the dwelling had been removed from the lot, and that the adjacent structure housing the auto repair facility had been replaced. The 1950 Sanborn Map shows that this lot had been converted to its current use as a parking lot, and that the adjacent structure was an office building.

The 1971 and 1977 aerial photographs show the car wash structure to be the same as currently exists.

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IV LOCAL AND ENVIRONMENTAL CONCERNS

A. Fuel Leak Cases

Based on our review of environmental case lists compiled with the San Francisco Bay Regional Water Quality Control Board (RWQCB) and the Department of Health Services (DHS), there are 8 sites with documented releases from underground storage tanks within 2000 feet of the property. These sites are shown on Plate 1, and described in the Appendix.

B. Hazardous Waste Cases

In addition to the sites with documented releases from underground storage tanks, there are 5 sites having documented contamination from materials considered hazardous under State and Federal laws within approximately 2000 feet of the site. These sites are also indicated on Plate 1. A brief summary of information available from the files regarding these cases is presented below.

1. Dunne Quality Paints, 1070 43rd Street, Oakland - This site contains a paint manufacturing facility. On January 25, 1988, 6 underground storage tanks with a total capacity of 18,000 gallons were removed from the site. Soil and groundwater contamination from paint thinner (mineral spirits) was noted. Monitoring wells have been installed.

2. Del Monte Plant #35, 1250 Park Avenue, Emeryville - A fruit cannery/plant is located at this site. Several underground

storage tanks were removed in early 1989; soil and groundwater contamination from fuel products and trichloroethylene and dichloroethylene were noted. Groundwater monitoring wells have been installed.

3. Electro Coatings, 1401 Park Avenue, Emeryville - A plating facility was previously located on-site. Chromium wastes were reportedly disposed in a shallow well which was later converted to a storage pit. Hexavalent chromium has been detected in the groundwater and in subsurface soil at the site. Volatile organic chemicals, including trichloroethylene, tetrachloroethylene, and trichloromethane have also been encountered. This site is currently listed as a backlog site on the DHS Hazardous Waste Sites list.

4. Oakland National Engravers, 1010 41st Street, Emeryville - This site is currently occupied by Rockridge Antiques, and includes a furniture stripping/antique restoration facility. Prior to 1980, Ameritone Paint (a subsidiary of Grow Group) manufactured paint at the site. The process involved the use of pigments, resins, and mineral spirits.

In early 1988, a groundwater investigation indicated contamination from xylenes and methylene chloride near an underground storage tank at the site. Remedial action is pending the results of further site investigation.

5. Pacific Gas & Electric (PG&E), 4525 Hollis Street, Emeryville - PG&E operates a material distribution center at this

site. It has served as a warehouse, repair shop, and storage yard for transformers and other electric supplies. The site also contains a tank farm storing fuel and transformer oil. Soil on-site is contaminated with polychlorinated biphenyls (PCB's) and lead. Groundwater is contaminated with heavy metals. This site is on the DHS Hazardous Waste Sites list as a potential Category 1, i.e., sites undergoing remediation by PG&E.

C. Adjacent Site Concerns

The historical research indicates that the adjacent sites were mostly used for purposes which do not normally involve significant contamination. The adjacent sites typically have contained dwellings, the Veterans Memorial Building and office buildings. The one exception is the former auto repair facility at 4330 San Pablo Avenue.

The auto repair facility existed in 1911. Auto repairing often involves the presence of fuels, solvents, oils and waste oils. It is unknown if underground storage tanks were located on the site.

D. On-Site Concerns

SCI conducted a site reconnaissance which included observing the site and surrounding features. While we observed no visual indications of current on-site activities which, in our opinion, could have resulted in significant on-site contamination, we judge that areas of concern do exist. These areas are associated with past use of 4300 San Pablo Avenue as a gasoline station, and

4320 San Pablo Avenue as an auto repair facility. Historical records regarding these past uses are limited.

The gasoline station at 4300 San Pablo Avenue operated from about 1930 to 1966. What is not known about the station includes (1) the underground gasoline storage tank location(s), (2) whether other materials, such as diesel fuel or waste oil, were stored in underground tanks, (3) whether the tanks were removed or not, and (4) whether hydraulic lifts or a sump existed.

The auto repair facility at 4320 San Pablo Avenue operated from about 1941 to 1954. SCI previously completed a Preliminary Contamination Assessment (SCI Job. No. 488.001) of the previous auto repair facility at 4320 San Pablo Avenue. SCI concluded that no detectable concentrations of TPH, TOG, and VOC's (EPA 8240 chemicals) exist in the soil at the investigated locations. A copy of the report is included in the Appendix.

V DISCUSSION AND CONCLUSIONS

A. General

We conclude that there is a risk of soil and/or groundwater contamination existing on the site from previous on-site activities at 4300 San Pablo Avenue. There is also a risk of groundwater contamination as a result of on-site and off-premises activities. These conclusions are discussed in the following sections.

B. Identified On-Site Sources

The property at 4300 San Pablo Avenue was previously a service station and is judged to be a potential source of contamination from gasoline, diesel fuel, waste oil, hydraulic oil and/or solvents. It is unclear whether underground fuel storage tanks remain on the property, or have been removed. We recommend at least 3 test borings/groundwater monitoring wells be installed at 4300 San Pablo to determine whether soil and groundwater contamination exists. As part of the investigation, test borings should be drilled at the location of the former pump islands and service garage.

An auto repair facility was formerly located at 4320 San Pablo Avenue. SCI previously completed a preliminary environmental assessment of this site. We concluded that the risk of soil contamination was low within the areas investigated.

C. Potential Off-Premises Sources

As previously discussed, there are several known environmental cases in the vicinity where soil and groundwater contamination exists. The cases most significant to the site are Oakland National Engraving at 1010 41st Street (approximately 800 feet to the east) and Dunne Quality Paint at 1040 41st Street (approximately 900 feet to the east). The most likely mode of transport for off-premises contamination reaching on-site involves groundwater. Although unconfirmed, it is likely that the direction of groundwater flow at the site is to the west, toward San Francisco Bay. On this basis, we judge that risk of

paint thinner and methylene chloride contaminated groundwater moving on-site may exist; however, the actual direction of groundwater flow should be confirmed during subsequent studies.

An auto repair facility was formerly located adjacent to the site, at 4330 San Pablo Avenue. This type of facility often involves the presence of fuels, solvents, oils and waste oil. We recommend that at least one test boring/monitoring well be installed on-site, adjacent to the previous facility, to investigate the presence of these materials in the soil and groundwater.

D. Unidentified On-Site and Off-Premises Sources

As is the case for all urban areas, a risk of contamination from commercial and residential uses exist at the site. For example, there is risk of shallow soil contamination from the previous use of household/commercial chemicals on site. These might have included pesticides, including those used for termites and/or other insects, paints containing leads, waste oil from private vehicle maintenance, herbicides, etc. In addition, there is a risk of a currently unidentified off-premises activity affecting the site. Typical urban sources of contamination include gasoline stations, dry cleaners, auto repair shops and facilities with underground heating oil tanks. The risk of contamination from on-site and off-premises sources is primarily associated with the fact that existing problems may be undetected or unreported to date and, hence, are not apparent through site inspection or review of existing information. These risks could

be sufficiently reduced, but not eliminated, by conducting a soil and groundwater testing program of the entire site. Such a study would provide a means to document whether soil or groundwater contamination currently exists.

VI LIMITATIONS

This Phase 1 Preliminary Environmental Assessment was conducted for the sole use of City of Emeryville as they contemplate development of the site. The conclusions drawn from this assessment are an expression of our professional opinion and do not constitute a warranty of guaranty, either expressed or implied. It should be understood that further study may modify the conclusions presented herein, as additional information becomes available.

Furthermore, this study was intended to provide the City of Emeryville with a preliminary indication of environmental concerns at the site, and is based on limited research of available data, informal interviews and agency inquiries, as time constraints would allow. Additional information may be available through a more detailed and complete study.

This study did not include an assessment of hazardous materials (such as asbestos and PCB's) within the existing structures at the site; nor did this study include an assessment of air quality at the site.

List of Attached Plates

Plate 1	Site Plan
Plate 2	Regional Map

Appendix

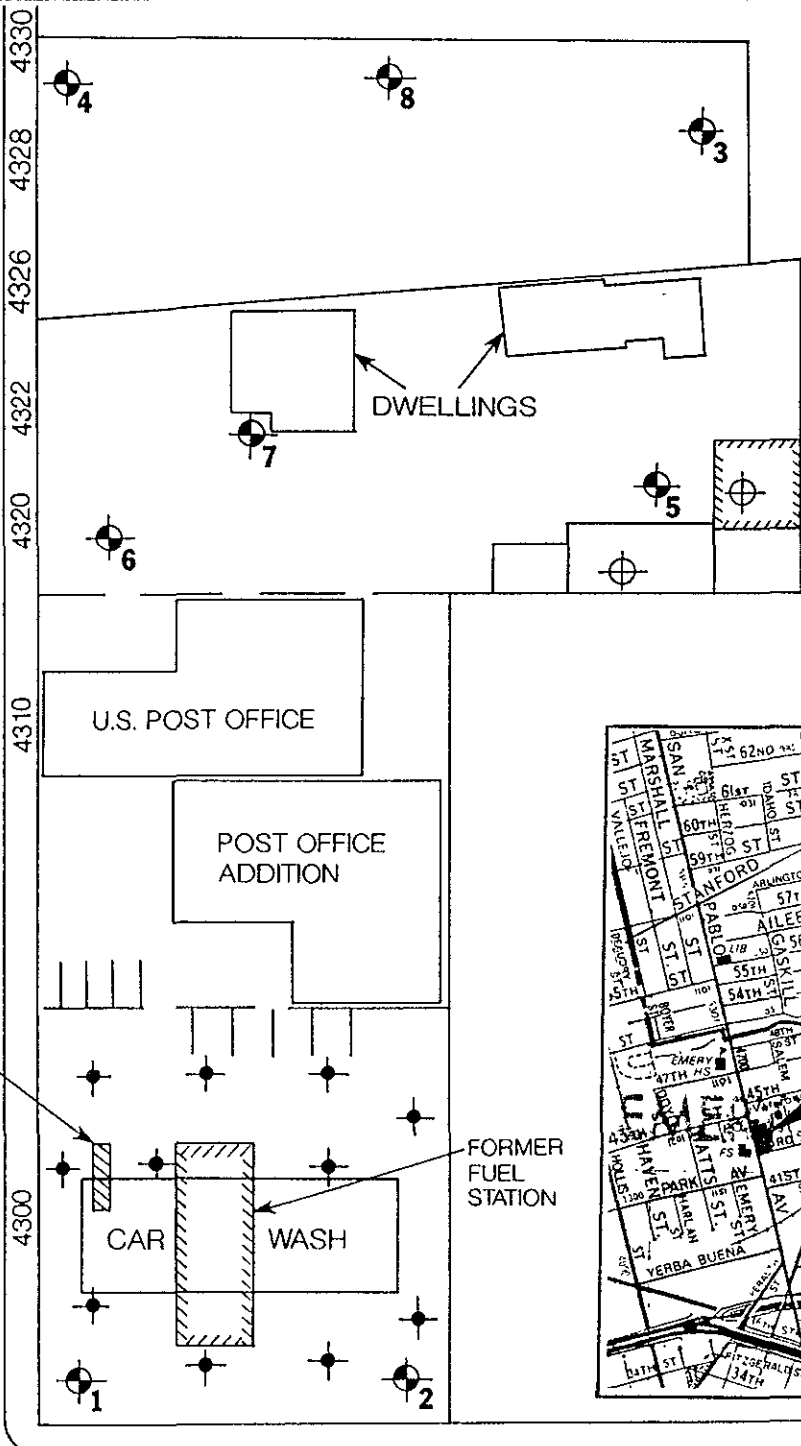
Historical Site Usage
List of Fuel Leaks

Distribution

6 copies:	City of Emeryville c/o Mr. Ignacio M. Dayrit 2200 Powell, 12th Floor Emeryville, California 94608
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SAN PABLO AVENUE



FORMER AUTO REPAIR FACILITY

DWELLINGS

U.S. POST OFFICE

POST OFFICE ADDITION

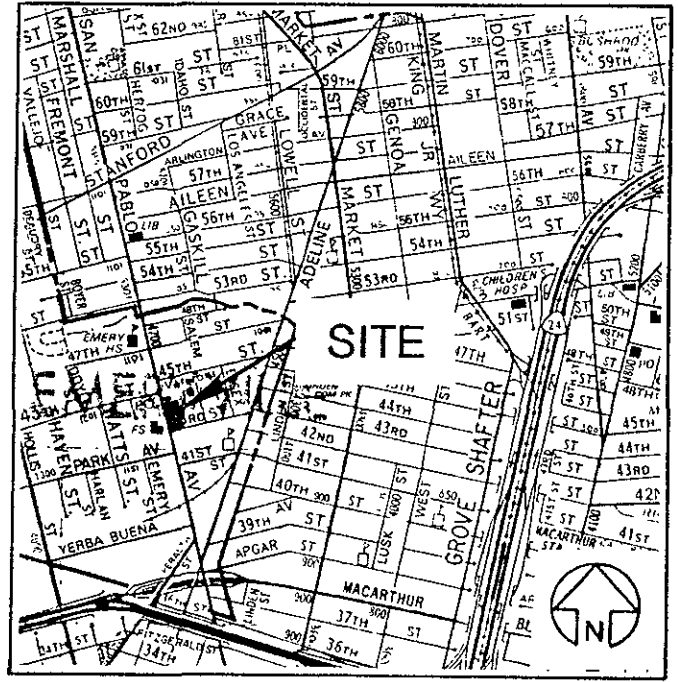
FORMER DISPENSER ISLAND

CAR

WASH

FORMER FUEL STATION

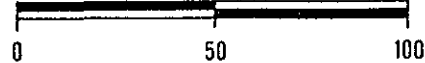
VICINITY MAP



SITE

43RD STREET

APPROXIMATE SCALE (feet)



- TEST BORING (THIS INVESTIGATION)
- TEST BORING (PREVIOUS INVESTIGATION)
- APPROXIMATE PROPOSED BORING LOCATIONS

SITE PLAN

Subsurface Consultants

EMERYVILLE SENIOR HOUSING - EMERYVILLE, CA

PLATE 1

JOB NUMBER 537.002

DATE 10/27/89

APPROVED

APPENDIX

The following cases are on file with the RWQCB as documented releases from underground storage tanks. These sites are identified on Plate 2. A brief summary of information available from the files regarding each case is presented in the following paragraphs.

1. California Linen Rental, 989 41st St., Oakland

Three steel underground storage tanks containing gasoline and fuel oil were removed from this site in February 1989. Analytical test results of soil samples collected after tank removal indicated TPH concentrations above 300 ppm; a water sample from the oil tank excavation had an oil and grease concentration of 14,000 ppm. The Traverse Group, Inc. has been retained to conduct a preliminary assessment to determine the extent of soil and groundwater contamination. The Work Plan for the site investigation includes installation of a minimum of three groundwater monitoring wells.

2. Berkeley Farms, 1313 53rd Avenue, Emeryville

Westco Industries currently operates at this location. Three underground storage tanks containing leaded and unleaded gasoline, and diesel fuel were removed in February 1988. Analytical test results of soil samples taken from the fuel tank

excavation showed TPH levels ranging from non-detectable to 8 ppm.

3. AC Transit Facility 45th/47th and San Pablo Avenue, Emeryville

The AC Transit Division 2, Emeryville, Operating Division has occupied the site since 1937. The original facilities for bus maintenance and operations included a large combined administration and maintenance building, a fuel island, a bus washer, and bus parking spaces. The district began reconstruction of the facility in 1983. Work was completed in stages while operations continued at the facility.

Areas found to be contaminated at this site include the old fuel island area and parts of the old maintenance building. Five fuel tanks were removed from the old fuel island areas, apparently in 1986. Analytical tests of soil samples indicated levels of contamination above DHS action limits. The tanks were removed and soils contaminated above 1000 ppm were disposed of at a Class I facility. Groundwater monitoring wells were installed and water sampled. As of March 5, 1987, the Alameda County Health Care Service Agency (ACHCSA) considered the remediation plan complete.

On October 15, 1987, an abandoned tank and an active waste oil tank were removed from areas near the eastern half of the old maintenance building. Analytical tests of soil samples beneath the tanks indicated petroleum hydrocarbon contamination at these locations. Soil contamination was also found during removal of

old service pits in the western half of the building. Additional contamination was suspected at various other locations at the site, and an initial analytical sampling and testing program was undertaken to characterize the extent of contamination. About 1500 cubic yards of contaminated soil was stockpiled on site in preparation for bioremediation. The results of bioremediation were not reported in the files.

4. Shell Development Co./City of Emeryville/Les Paul-Kenneth Schnier - 1199 Park Avenue, Emeryville

An underground storage tank (or tanks) were reportedly removed in late 1987. TPH and TOG concentrations of 3500 and 800 ppm were noted, respectively. A site characterization study was performed by Engineering Science. Crosby and Overton also have reportedly completed a "Report of Chronological Order of Cleanup" in late 1987. The City of Emeryville currently maintains ownership of the property. The RWQCB files do not indicate if groundwater monitoring wells have been installed.

5. Del Monte Corporation, 1250 Park Street, Emeryville

A fruit canning plant is located at this site. Underground storage tanks were removed during early 1986. Soil samples from beneath the tanks had TVH concentrations of up to 1500 ppm. Monitoring wells have been installed to determine the gradient and direction of groundwater flow.

Another gasoline storage tank with a capacity of 550 gallons was removed on March 22, 1989. As per RWQCB guidelines, a

groundwater monitoring well was installed downgradient of the former tank location.

Four 50 gallon underground tanks were also removed on March 22, 1989. The substances involved with these tanks reportedly include trichlorethylene and dichloroethylene. Although an unauthorized release report was filed, contamination levels in soil or groundwater were not noted.

6. Ransome Company, 4030 Hollis Street, Emeryville

The files indicate that a failed precision test of underground storage tanks at the site occurred on May 25, 1988.

7. GROW Group - Oakland National Engravers - 41st between Linden and Adeline, Emeryville

Oakland National Engravers currently owns and leases a portion of this facility to Rockridge Warehouse, an antique furniture refinishing facility. One 6000 gallon underground storage tank exists, which contains methylene chloride and xylenes. In addition, a groundwater sample taken from a temporary monitoring well indicated a methylene chloride concentration of 720 ppm. Free product is believed to be present on the groundwater adjacent to the western end of the tank. To date, no permanent groundwater monitoring wells have been installed to assess the impact of the leak.

8. Berkeley Farms, 4550 San Pablo Avenue, Emeryville

Berkeley Farms operates two milk-processing facilities at this location. Reportedly, an underground gasoline tank (or tanks) exists at the location.

HISTORICAL SITE USAGE

The following represent a partial reconstruction of the usage of the properties at 4300-4322 San Pablo Avenue, Emeryville. It is based on research involving:

1. Sanborn Fire Insurance Maps,
2. Historical directories,
3. Review of aerial photographs.

This list is based upon review of available information at the time of compilation of this report; as it does not reflect a complete chronological listing of land and building uses in the area, it should not be considered as completed.

4300 San Pablo Avenue

1903	Vacant
1911-1929	Vacant?
1930-1933	J.C. McIlree Service Station
1933-1957	General Petroleum
1958-1965	Mobil Petroleum
1966-1968	Vacant
1969-present	Scotch Car Wash

4310 San Pablo Avenue

1903	Vacant
1911	Vacant
1911-1946	No data
1947-present	Emeryville Branch, U.S. Post Office

4320-4322 San Pablo Avenue

1941-1954 M.B. Matson Auto Repairing
Prior to 1941 and after 1954, it appears the site usage was residential

4326-4328 San Pablo Avenue

1903	Vacant
1904-1910	No data
1911	Residential dwelling
1912-1946	No data
1947	Vacant
1948-1949	No data
1950-Present	Parking lot

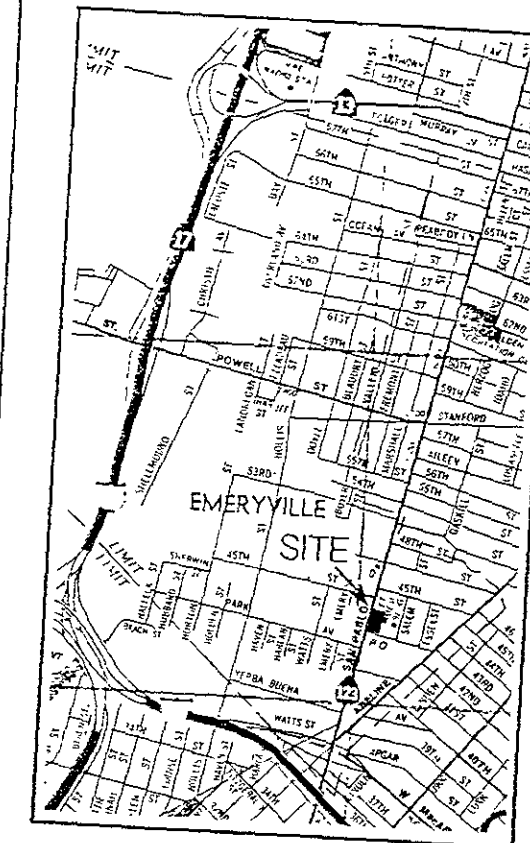
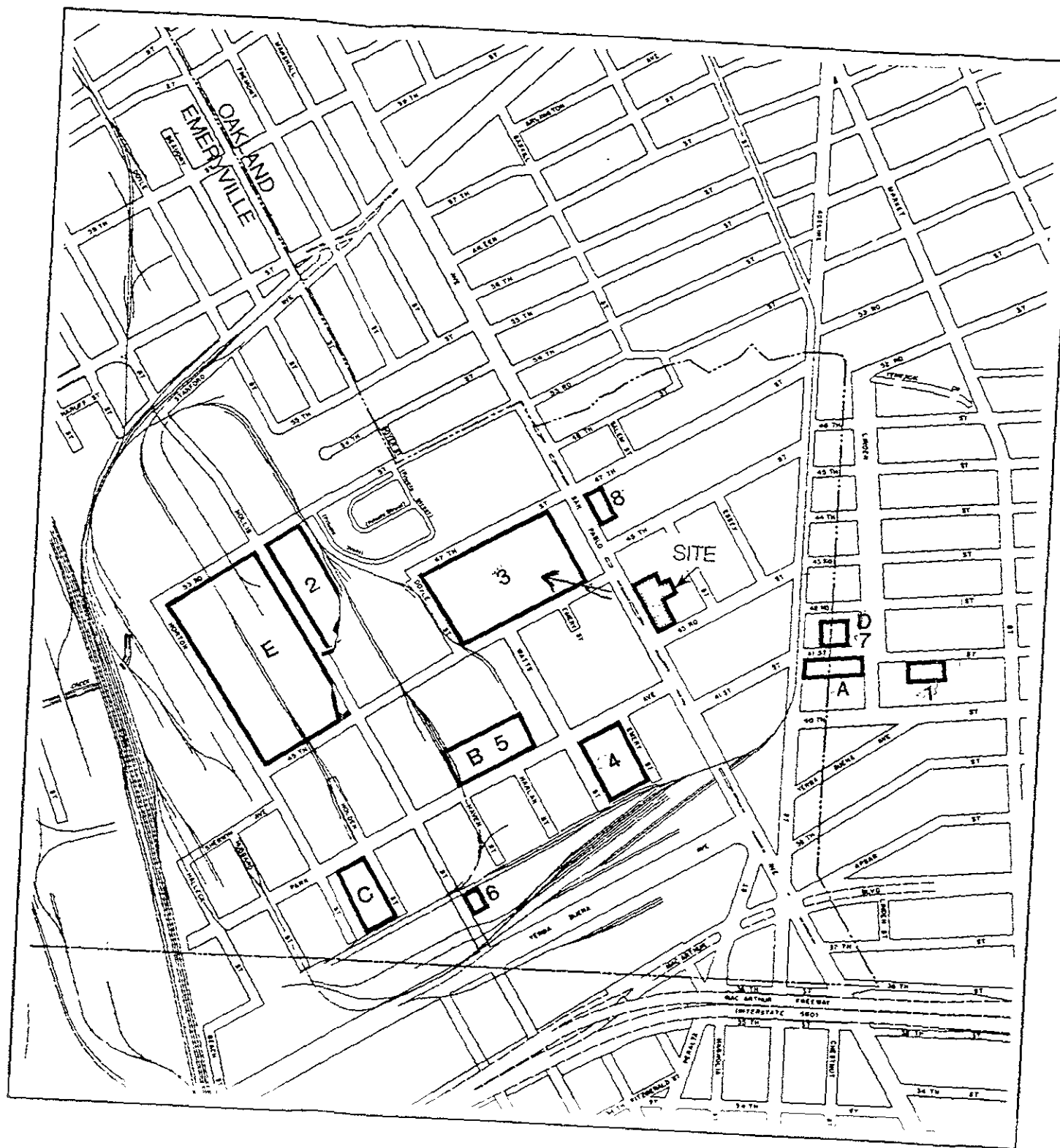
PROPERTIES WITH REPORTED TOXIC CASES OR FUEL RELEASES WITHIN 2000 FEET OF SITE

TOXIC CASE LIST SITES

- A. Dunne Quality Paints
1007 41st St., Oakland
- B. Del Monte Plant #5
1250 Paul Avenue, Emeryville
- C. Electro Coating
1401 Park Avenue, Emeryville
- D. Oakland National Engraving
1010 41st Street, Emeryville
- E. Pacific Gas & Electric
4525 Hollis Street, Emeryville

FUEL RELEASE SITES

- 1. California Linen Rental
989 41st Street, Oakland
- 2. Berkeley Farms
1313 53rd Avenue, Emeryville
- 3. AC Transit Facility
45/47th & San Pablo Avenue, Emeryville
- 4. Shell Development Co./City of Emeryville/Les Paul
1199 Park Avenue, Emeryville
- 5. Del Monte Corporation Plant #35
1250 Park Avenue, Emeryville
- 6. Ransome Company
4030 Hollis Street, Emeryville
- 7. Oakland National Engraving/Grow Group
1010 41st Street, Emeryville
- 8. Berkeley Farms
4550 San Pablo, Emeryville



VICINITY MAP

APPROXIMATE SCALE (feet)



Subsurface Consultants

REGIONAL MAP		PLATE
EMERYVILLE SENIOR HOUSING		2
JOB NUMBER	DATE	APPROVED
537 002	10/25/89	<i>[Signature]</i>