IV. ENVIRONMENTAL IMPACT ANALYSIS
G. HAZARDOUS MATERIALS

This section assesses potential environmental impacts associated with existing soil and/or groundwater contamination at the Project site. The analysis summarizes the findings and conclusions provided in an updated Phase I environmental assessment report (*Updated EA Report*) prepared by SCS Engineers (SCS) for six discrete areas of the Project site in general accordance with American Society of Testing and Materials (ASTM) standards. The report is provided in Appendix F of this Draft EIR.

The six development areas are referred to in the *Updated EA Report* as Olympic West Properties (Block 1), Olympic East Properties (Block 2), Olympic North Properties (Block 3), Figueroa North Properties (Block 4), Figueroa Central Properties (Block 5), and Figueroa South Properties (Block 6).[43] The Project Site has been paved and currently is used for surface parking activities, with the exception of two warehouse-related buildings located on the Figueroa Central Properties, as described in Section IV. A., Land Use.

1. ENVIRONMENTAL SETTING

(a) General Soil and Groundwater Conditions

The Project site is located within the Downey Plain of the Los Angeles Coastal Plain. It is situated at an elevation of approximately 240 feet above mean sea level. The regional topography of the area slopes gently to the south-southwest. Soils beneath the site consist primarily of Quaternary alluvial sediments (clay, silt, sand, and gravel) to a depth of approximately 80 feet below ground surface (bgs).

The Project site is located in the Los Angeles Forebay Area of the Central Groundwater Basin. Groundwater in this area is estimated to be at approximately 80 to 100 feet bgs, although perched groundwater conditions may exist at shallower depths. Previous investigations at the Project site encountered groundwater at depths as shallow as 60 feet bgs. However, soil borings advanced in other areas of the Project site to depths of 150 feet bgs did not encounter groundwater. Based upon regional topography, general groundwater flow direction in the vicinity of the site is to the south.

The Figueroa Central and Figueroa South properties lie within an area broadly defined as the Los Angeles Downtown Oil Field. According to Division of Oil and Gas maps, oil exploration in areas closest to the site did not produce oil and holes were not completed as wells. The only oil producing area in the Los Angeles Downtown Oil Field is at 14th and Hill Streets, approximately 1,800 feet southeast of the property.[44]

Elevated concentrations of methane gas can be associated with oil fields. The lower explosive limit for methane in air is five percent by volume (equivalent to 50,000 parts per million by volume or ppmv). The action level typically used for methane gas in air is 20 percent of the lower explosive limit or one percent by volume (10,000 ppmv).

To understand the extent of potential methane issues related to Project development, soil vapor samples were collected at 16 locations within the Figueroa Central and Figueroa South properties. Locations were selected to provide an adequate sampling program throughout the potentially affected portions of the Project site. Samples were collected at representative depths below the ground surface (i.e., ranging from shallow samples at two and ten feet below the surface to deep samples at 40 feet below the surface). At a depth of ten feet below the surface, methane was detected in six samples at concentrations between 10 and 74 ppmv. No methane was detected in the two 40-foot samples at a detection limit of 10 ppmv. Thus, the highest methane concentration level detected during the sampling program was 74 ppmv. This concentration level is far below the lower explosive limit for methane in air of 50,000 ppmv and below the typical action level of 10,000 ppmv. Based on these results, subsurface methane accumulations do not appear to be a concern at the Figueroa Central and Figueroa South properties. Furthermore, concentrations of carbon dioxide detected as part of this investigation were also low, indicating no aerobic decomposition of organics is occurring.

(b) Updated Phase I Environmental Assessment Report

The scope of work for the *Updated EA Report* included the review and compilation of findings from three separate Phase I Environmental Site Assessment (ESAs) performed by Bryan A. Stirrat & Associates and SCS. Previous ESA efforts are documented in three separate reports: Bryan A. Stirrat & Associates' *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California,* dated October 4, 1996; SCS' *Phase I Environmental Assessment Report, Olympic Properties North, Los Angeles, California,* dated

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[43] *Reference to "Block 1 … Block 6" in the Updated Report are consistent with "development areas" 1 through 6 provided in Section II. B., Project Location, of this Draft EIR.*

[44] *"Subsurface Methane Gas Survey Report, LA Sports and Entertainment District, Figueroa Central and South Parcels, Los Angeles, California", SCS Engineers, November 3, 2000.*

September 8, 1997; and SCS' *Phase I Environmental Assessment Report, Figueroa Properties North, Los Angeles, California,* dated August 6, 1997.[45]

The *Updated EA Report* also involved the following work efforts at the Project site: (1) review of regulatory agency files (2) review of federal, State, and local environmental databases; (3) physical site inspections of the six areas of the Project site and adjacent properties; (4) interviews with available on-site personnel and property owners regarding current and past land uses that may have impacted the site; and (5) review of historical records including aerial photographs, fire insurance maps, and hydrogeologic and topographic maps.

(1) Regulatory Agency Database Review

A records search of Federal, State, and local environmental databases was performed for the Project site and surrounding area.[46] The following databases were searched:

- **United States Environmental Protection Agency's (USEPA's) National Priority List (NPL)/Superfund Sites.** The NPL Report, also known as the Superfund List, is an USEPA listing of uncontrolled or abandoned hazardous waste facilities. Listed facilities are targeted for possible long-term remedial action under the Superfund Act of 1980.

- **The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS).** The CERCLIS database is a comprehensive listing of known or suspected uncontrolled or abandoned hazardous waste facilities. Once a facility is placed in CERCLIS, it may be subjected to several levels of review and evaluation and ultimately placed on the NPL.

- **Resource Conservation and Recovery Information System (RCRIS).** The RCRIS Report contains information pertaining to facilities that treat, store, or dispose of USEPA regulated hazardous wastes. The RCRIS list includes both small and large quantity generators of Resources Conservation and Recovery Act (RCRA) wastes, as well as hazardous waste treatment, storage, and disposal facilities.

- **No Further Remedial Action Planned (NFRAP) Sites.** The NFRAP Report, also known as the CERCLIS Archive, contains information pertaining to facilities that have been removed from the CERCLIS database. NFRAP facilities may be properties where, following an initial investigation, either no contamination was found, contamination was removed quickly without the need to place the property on

[45] *Reports referenced here are summarized in the Updated EA Report provided in Appendix F.*

[46] *The search areas for each database are in accordance with ASTM Standard E1527 (i.e., the industry standard).*

the NPL, or the contamination was not found to be serious enough to warrant NPL consideration.[47]

- **Emergency Response Notification System (ERNS) List.** ERNS is a national computer database system that contains information concerning the sudden and/or accidental release of hazardous substances, including petroleum, into the environment.

- **Registered Storage Tank (RST) List.** The California Underground Storage Tank (UST) Report, commonly known as the SWEEPS Report, is a comprehensive listing of all registered USTs in California.

- **California Leaking Underground Storage Tank (LUST)[48] List.** The LUST lists of the Regional Water Quality Control Boards (RWQCBs) contain information regarding reported LUSTs.

- **Hazardous Waste Sites (HWS).** Potentially contaminated hazardous waste properties in California are listed in the California CalSites Report.

- **Solid Waste Facilities (SWF) List.** The California Solid Waste Information System Report, commonly known as the SWIS Report, contains information pertaining to all permitted and unpermitted active and inactive solid waste landfills, proposed disposal sites, transfer stations, and material recovery facilities in the state.

- **California Cortese (Cortese) List.** The Cortese list, also known as the Hazardous Waste and Substances list, contains summary information pertaining to contaminated facilities in the State of California, including contaminated wells, leaking USTs and sanitary landfills.

- **California Oil & Gas Well Report (OGW).** The OGW contains location and production information for all regulated oil and gas wells located within the State of California.

The results of the database search revealed that one of the addresses within the Project site (Olympic East Properties) was identified: Mix and Match, 769 West 10th Place. This property was identified as a small-quantity hazardous waste generator.[49] The database report included no mention

[47] *A site located upgradient from known contaminated sites would be of greater concern, since subsurface gradual migration of soil and groundwater contaminants might directly affect the Project site.*

[48] *The "LUST" nomenclature refers to sites listed in the California Leaking Underground Storage Tank database as leaking USTs.*

[49] *Small quantity generators are generators who consistently produce less than 1,000 kg of hazardous waste in a given calendar month, in 22 CCR §66262.34.*

of any violations or citations relative to this classification. This business has been demolished and is now a parking lot. Based on the available information, this property has not affected the existing environmental conditions at the Project site.

Ninety-six properties (several listed under more than one database) within a 0.25-mile radius of the Project site are included in the database report. These properties include:

- 69 UST properties;
- Five leaking underground storage tank LUST properties;
- 25 hazardous waste generators;
- Three Cortese properties;
- Two ERNS properties;
- Three County oversight properties; and
- One State CERCLIS/CERCLIS-NFRAP property.

Of these 96 properties, 86 of the properties are solely UST or generator properties. The properties with the greatest potential for contamination adjacent to the Project site, or with known contamination within 0.25 miles of the Project site, include the following:

Family Ford, 1248 South Figueroa Street (UST and generator) – This facility maintained one waste oil UST and generated hazardous wastes from auto repair. The facility is currently vacant. Based on the available information, this facility has not affected the existing environmental conditions at the Project site.

Los Angeles Convention and Exhibition Center, 1201 South Figueroa (LUST, Cortese, UST, and generator) - A gasoline release from UST piping was reported in 1988. The piping was replaced and the case is currently closed. Based on the case status, this leak has not affected the existing environmental conditions at the Project site.

Chevron Station, 801-811 West Olympic Boulevard (LUST, UST, and generator) – Tank monitoring systems detected a fuel release from USTs at this facility in 1999. The facility is currently being investigated, and the extent of contamination has not been defined.

Unocal Station, 730 West Olympic Boulevard (LUST, UST, and Cortese) - A fuel release from an UST was reported at this facility in 1994. Only on-site soils were impacted and the

case is currently closed. Based on the extent of contamination and the current case status, this release has not affected the existing environmental conditions at the Project site.

Del Prado, 511 Olympic Boulevard (County oversight) - The nature of the problem at this facility was not readily apparent from the available information. However, given the distance and cross-gradient groundwater flow direction relative to the Project site, this property has not affected the existing environmental conditions at the Project site.

Chevron Station, 1312 West 11th Street (LUST, Cortese, UST, generator) - A potential leak was detected at this facility in 1994 during a routine tank test. However, no additional actions appear to have been taken at this property. As the property lies in a cross-gradient groundwater flow direction relative to the Project site and on the other side of the Harbor Freeway, this property has not affected the existing environmental conditions at the Project site.

801 Tower Building, 845 South Figueroa (LUST) - A gasoline release from an UST was reported at this facility in 1993. Contaminated soils were excavated and removed from the property. The case is currently closed. Reportedly, groundwater was also impacted. The property lies in an upgradient groundwater flow direction from the Project site. However, the closed status of the case suggests that no significant off-site migration of contamination was detected. Based on the available information, this property has not affected the existing environmental conditions at the Project site.

American Banknote, 701 South Grand Avenue (State CERCLIS, CERCLIS-NFRAP, County oversight, and generator) - This facility was originally listed on Federal and State CERLCIS lists in 1981. Subsequent regulatory assessments yielded NFRAP (No Further Remedial Action Planned) classification. However, the property was referred to the County for additional assessment. American Banknote is no longer in business at this address. This property lies in a downgradient groundwater flow direction relative to the Project site. Based on the available information, this property has not affected the existing environmental conditions at the Project site.

Alameda Management, 701 South Grand Avenue (LUST) – An UST release was discovered at this facility during a tank test in 1987. The case is currently closed. Based on the case status and the distance from the Project site, this property has not affected the existing environmental conditions at the Project site.

California Medical Center, 1500 South Grand Avenue (County oversight) - The precise nature of the problem at this property was not readily available, although it appears to have been a single incident and not an ongoing concern. Based on the distance and downgradient groundwater flow direction relative to the Project site, this property has not affected existing environmental conditions at the Project site.

No federal or State Superfund sites were identified within one mile of the Project site. In addition, no landfills were identified within a one-mile radius of the Project site. Two abandoned dry wells were identified. Activities associated with the drilling of these wells have not affected existing environmental conditions at the Project site. No other wells were identified on or within 0.1 mile of the Project site.

(2) Previous Environmental Investigations[50]

(i) Olympic West Properties (Block 1)

This area is bounded to the north by Olympic Boulevard, to the east by Georgia Street, to the south by 11th Street, and to the west by Cherry Street and the Harbor Freeway. This area was included in the ESA completed by Bryan A. Stirrat & Associates (BAS) dated October 4, 1996 titled *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California,* and was identified as "Area 1." At the time of the assessment, Area 1 consisted of 40 lots bounded by Olympic Boulevard on the north, Georgia Street on the east, West 11th Street on the south, and the Harbor Freeway on the west. Two north-south streets, Byram Street and South Bixel Street divided the area into three parts. Property uses included vacant lots (6 lots), parking (10 lots), residential (7 lots), a day care center (1 lot), medical/dental clinics (3 lots), office buildings (3 lots), warehouses (3 lots), and commercial (7 lots).

In 1997, SCS conducted another ESA and the results of that assessment are provided in a report titled *Los Angeles Sports Arena and Entertainment Complex Support Site, Phase I Environmental Assessment Second Party Review,* dated April 11, 1997. SCS recommended subsurface investigations for six properties. Phase II investigations were performed and the results are provided below.

1106 West Olympic Boulevard - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples in the vicinity of a former spray booth. Volatile organic compounds (VOCs) were not detected. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, Lees 328 Limited Partnership, 1106 West Olympic Boulevard, Los Angeles, California (APN 5138-007-002),* dated December 19, 1997.

1054 Byram Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in the soil vapor samples. Metal concentrations in the soil samples were consistent with typical background concentrations. Trace concentrations of petroleum hydrocarbons (less than 53

[50] *Reports referenced below are summarized in SCS Engineers' Updated EA Report provided in Appendix F.*

mg/kg) were detected in soil; these concentrations are not a significant concern. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 1054 Byram Street, Los Angeles, California (APN 5138-007-035),* dated December 23, 1997.

1011 West 11th Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in the soil vapor samples. Metal concentrations in the soil samples were consistent with typical background concentrations. Trace concentrations of petroleum hydrocarbons (less than 70 mg/kg) were detected in soil; these concentrations are not a significant concern. No PCBs were detected. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 1011 West 11th Street, Los Angeles, California (APN 5138-007-905),* dated January 13, 1998.

1025-27 South Georgia Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in the soil vapor samples. Metal concentrations in the soil samples were consistent with typical background concentrations. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 1025-1027 South Georgia Street, Los Angeles, California (APN 5138-008-013),* dated December 22, 1997.

1035-37 South Georgia Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. Trace concentrations of VOCs (less than 2.5 ìg/l of TCE) were detected in the soil vapor samples. VOC concentrations below 50 ìg/l are generally considered insignificant. Metal concentrations in the soil samples were consistent with typical background concentrations. Trace concentrations of petroleum hydrocarbons (less than 30 mg/kg) were detected in the soil samples; these concentrations are not a significant concern. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 1035-1037 South Georgia Street, Los Angeles, California (APN 5138-008-019),* dated December 24, 1997.

955 West 11th Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in soil vapor samples. With one exception, metal concentrations were consistent with typical background concentrations. One soil sample revealed a lead concentration of 130 mg/kg. A deeper sample collected from the same boring contained only trace concentrations. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 955 West 11th Street, Los Angeles, California (APN 5138-008-900 & -902),* dated January 13, 1998.

(ii) Olympic East Properties (Block 2)

This area is bounded to the north by Olympic Boulevard, to the east by Figueroa Street, to the south by 11th Street and to the west by Georgia Street. This area was included in the Phase I Assessment completed by BAS dated October 4, 1996 titled *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California,* (identified as "Area 2"). At the time of BAS' assessment, the area was characterized as consisting of a mixture of manufacturing facilities, commercial businesses, parking lots, and residences.

In 1997, SCS conducted another ESA and the results of that assessment are provided in a report titled *Los Angeles Sports Arena and Entertainment Complex Support Site, Phase I Environmental Assessment Second Party Review* dated April 11, 1997. SCS recommended subsurface investigations for thirteen properties. Phase II investigations were performed and the results are provided below.

1024 South Georgia Street – A Phase II Investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in soil vapor samples. Low concentrations (less than 105 mg/kg) of petroleum hydrocarbons were detected on the property. Metals concentrations in the soil samples were at concentrations indicative of typical background levels. An UST and clarifier were identified within the sidewalk on the west side of the property. SCS recommended that the UST and clarifier be removed in accordance with regulatory requirements. Results of this investigation are provided in the report titled *Phase II Investigation Report, Sports Arena Complex Site, 1024 South Georgia Street, Los Angeles, California (APN 5138-009-019),* dated January 15, 1998.

The UST and clarifier were removed from the property on March 18, 1999 with the oversight of the RWQCB and the Los Angeles Fire Department (LAFD). During the removal, stained soils observed in the excavation were removed and stockpiled on the property. Concentrations of petroleum hydrocarbons in soil samples collected from the base and sidewalls of the excavation following removal were below the limits of detection. Based on these data, SCS recommended closure of the UST. Information pertaining to the closure of the tank is provided in the report titled *Underground Storage Tank Closure Report, Staples Arena Complex Site, 1024 Georgia Street, Los Angeles, California (LAFD Closure Permit No. 7782),* dated April 23, 1999. On August 18, 2000, the LAFD issued a no further action letter for the UST on the property.

846 West Olympic Boulevard – A Phase II investigation was completed by SCS in December 1997, which consisted of collecting and analyzing soil vapor and soil samples. Elevated concentrations of petroleum hydrocarbons (up to 1,580 mg/kg) and lead (up to 3,890 mg/kg) were identified in soil samples. SCS recommended that additional

investigation be completed to further characterize the contaminants. Results of that investigation as described in the SCS report titled *Phase II Investigation Report, Sports Arena Complex Site, 846-900 West Olympic Boulevard, Los Angeles, California (APN 5138-009-025),* dated January 8, 1998.

A second phase of investigation was completed in February 1998 by SCS, which consisted of additional soil sampling and analysis activities. Results of this investigation are summarized in the SCS report titled *Supplemental Investigation Report, Sports Arena Complex Site, 846-900 West Olympic Boulevard, Los Angeles, California (APN 5138-009-025),* dated February 27, 1998. The supplemental investigation indicated that the elevated concentrations of petroleum hydrocarbons and lead previously detected on the site were limited in area. However, SCS recommended that the petroleum hydrocarbon and lead-impacted soil identified on the site be remediated.

In January 1999, soil remediation activities were conducted, which consisted of removing approximately 83 cubic yards of soil. Remedial activities were completed with the oversight of the RWQCB and in accordance with the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California,* dated December 30, 1998. Contaminated soil was transported under manifest to an appropriate disposal facility. A summary of remedial action activities is provided in the SCS report titled *Report of Soil Remediation, 1001-1005 and 1015 South Figueroa Street and 846-900 West Olympic Boulevard, Los Angeles, California,* dated January 28, 1999.

844 West Olympic Boulevard – A Phase II investigation was completed in December 1997, which consisted of collecting and analyzing soil vapor and soil samples. As indicated in the report titled *Phase II Investigation Report, Sports Arena Complex Site, 838-840 West Olympic Boulevard, Los Angeles, California (APN 5138-009-002* January 8, 1998), no detectable concentrations of VOCs were detected in the soil vapor samples. Laboratory analysis of soil samples indicated low concentrations of petroleum hydrocarbons (36 to 227 mg/kg), and soils with a pH range of 7.48 to 11.74. Based on these results, further site investigation was not recommended.

During demolition activities on the site in mid-March 1999, the demolition contractor noted strong gasoline odors in surface soils. Subsequently, several phases of investigation were conducted by SCS to assess the nature and extent of fuel hydrocarbons within soil and a thin zone of groundwater beneath the property. Fuel hydrocarbons, characterized as consisting of gasoline, were detected on the site at concentrations up to 7,300 mg/kg. The investigations indicated an area approximately 50- by 90-feet area and extending in depth from 20 to 60 feet bgs contained concentrations of gasoline in soil greater than 100 mg/kg. Groundwater, present in a thin-perched zone at approximately 60 feet bgs had also been impacted, with fuel hydrocarbon concentrations up to 4,700 mg/l. However, the data

indicated that the groundwater impacts were limited in area to less than approximately 200 feet in diameter.

On May 4, 1999, with the approval of the RWQCB and in accordance with a letter work plan dated April 22, 1999 prepared by SCS, soil from the upper 5 feet within the impacted area was excavated and subsequently removed from the site as an "interim" remedial action. Following excavation, 277 tons of material was transported off-site for disposal. Results of the investigations and interim remedial action are provided in the report titled *Remedial Investigation/Remedial Action Report, Staples Arena Support Zone, 834-840 West Olympic Boulevard, Los Angeles, California,* dated June 24, 1999. Based on the information in this report, closure of surface soil on this site was granted by the RWQCB in August 1999.

A work plan *(Soil Vapor Extraction System Installation Work plan, Staples Arena Support Zone, 834-840 West Olympic Boulevard, Los Angeles, California)* for installation of a vapor extraction system to mitigate soil contamination was approved by the RWQCB in July 1999. The system has operated since May 2000. It is anticipated that the system will operate through approximately April 2001 at which time a confirmation investigation will be completed to verify that gasoline concentrations have been appropriately mitigated. A groundwater assessment will also be completed at that time.

751-755 10th Place – A machine shop and piston ring warehouse had historically been operated on this property. SCS conducted a Phase II investigation, which consisted of collecting and analyzing soil vapor and soil samples. Results of the analysis [refer to SCS report titled *Phase II Investigation Report, Sports Arena Complex Site, 751-755 10th Place, Los Angeles, California (APN 5138-009-028),* dated January 1998]indicated trace to non-detectable concentrations of VOCs in the soil vapor samples. Low concentrations (less than 505 mg/kg) of petroleum hydrocarbons were detected in the soil samples and metals were detected at typical background concentrations. PCBs were not identified in soil samples. SCS recommended no further investigations.

1001 South Figueroa Street – SCS conducted a Phase II investigation, which consisted of the collection and analysis of soil and soil vapor samples. The results of the soil vapor survey revealed non-detectable concentrations of VOCs. Metal concentrations were detected at concentrations, which do not represented significant potential impacts to human health or the environment. However, petroleum hydrocarbons were detected in soil matrix samples at concentrations ranging from 17 to 1,170 mg/kg. Additional investigation was recommended by SCS to further characterize the petroleum hydrocarbons. A summary of the initial investigation is contained in the report titled *Phase II Investigation Report, Sports Arena Complex Site, 1001 through 1005 South Figueroa Street, Los Angeles, California (APN 5138-010-009),* dated January 6, 1998.

An additional investigation was conducted by SCS in February 1998. This additional investigation is contained in the report titled *Supplemental Soil Investigation Sports Arena*

Complex Site, 1001 through 1005 South Figueroa Street, Los Angeles, California (APN 5138-010-009). The data indicated that the elevated concentrations of petroleum hydrocarbons previously detected at the site were limited in depth to soils less than 15 feet in depth. Remediation of the petroleum-impacted soil was recommended.

Remediation of impacted soil was conducted in January 1999, which consisted of removal of approximately 52 cubic yards of soil. Remedial activities were completed with the oversight of the RWQCB and in accordance with the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California,* dated December 30, 1998. Excavated soil was transported off-site for disposal. A summary of remedial action activities is provided in the SCS report titled *Report of Soil Remediation, 1001-1005 and 1015 South Figueroa Street and 846-900 West Olympic Boulevard, Los Angeles, California,* dated January 28, 1999.

1007 through 1013 South Figueroa Street – A Phase II investigation was conducted by SCS as described in the report titled *Phase II Investigation Report, Sports Arena Complex Site, 1001 through 1005 South Figueroa Street, Los Angeles, California (APN 5138-010-009),* dated January 6, 1998. The results of the soil vapor survey indicated no VOCs were detected. Low concentrations (less than 600 mg/kg) of petroleum hydrocarbons were detected in soil matrix samples from the site. Metals were detected at concentrations typical of soils in southern California. Based on these data, no additional investigation was recommended by SCS.

1015 South Figueroa Street – As summarized in SCS' *Phase II Investigation Report, Sports Arena Complex Site, 1015 South Figueroa Street, Los Angeles, California (APN 5138-010-019),* dated December 31, 1997, a three-point soil vapor study was completed. No detectable concentrations of VOCs were identified. Two samples of sediments from the bottom of a small sump within the building were collected and analyzed. Cadmium and lead were detected at elevated concentrations, up to 2,480 mg/kg and 3,240 mg/kg, respectively. In addition, PCE was detected at concentrations up to 310 µg/kg. Further investigation was recommended to characterize the contaminants.

A second phase of investigation was conducted and the results of this investigation are provided in the report titled *Supplemental Soil Investigation Report, Sports Arena Complex Site, 1015 South Figueroa Street, Los Angeles, California (APN 5138-010-019).* The supplemental investigation identified the presence of VOCs. However the concentrations did not warrant further investigation. Cadmium was detected in soil samples at background levels. Lead was detected within one sample at an elevated (1,400 mg/kg) concentration. Based on these data, SCS recommended that remediation of the sump and impacted soil be conducted.

Soil remediation activities were conducted in January 1999 to remove cadmium-, lead-, and PCE-impacted soil from the vicinity of the sump. Approximately 67 cubic yards of soil

were excavated from the site with the oversight of the RWQCB and in accordance with the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California,* dated December 30, 1998. Excavated soil was transported to an appropriate disposal facility. A summary of remedial action activities is provided in the SCS report titled *Report of Soil Remediation, 1001-1005 and 1015 South Figueroa Street and 846-900 West Olympic Boulevard, Los Angeles, California,* dated January 28, 1999.

1017-1025 South Figueroa Street – A Phase II investigation was completed, which consisted of collecting soil vapor and soil samples from three locations. Results of the investigation are provided in the SCS report titled *Phase II Investigation Report, Sports Arena Complex Site, 1017 South Figueroa Street, Los Angeles, California (A.P.N. 5138-010-012)* dated January 6, 1998. VOCs were not detected in soil vapor samples. Petroleum hydrocarbons were detected at low concentrations, ranging up to 70 mg/kg. Most metals were detected at background concentrations typical of soils in southern California, and soil pH values were within the range anticipated for soils in this area. Based on this information, no further investigation was recommended for the property.

1021-1037 South Figueroa Street – In October 1997, a Phase II investigation was completed which consisted of collecting soil vapor and soil samples. The results of the investigation are summarized in the report prepared by SCS titled *Phase II Investigation Report, Sports Arena Complex Site, 1021-1037 South Figueroa Street, Los Angeles, California (APN 5138-010-020),* dated December 17, 1997. Results of the soil vapor survey indicated the presence of trace concentrations (less than 0.5 ìg/l) of several VOC constituents, none of which were present at concentrations that would be of concern. Low concentrations (less than 292 milligrams per kilograms) of total recoverable petroleum hydrocarbons were detected in soil matrix samples from the site. Most metals were detected at concentrations typical of southern California soils. Lead was present at concentrations less than 100 mg/kg in all but one sample, which had a lead concentration of 295 mg/kg. None of these concentrations are anticipated to represent a significant health risk, therefore, no further investigation was recommended for the property.

740-750 West 10th Place – As summarized in SCS' *Phase II Investigation Report, Sports Arena Complex Site, 740-750 West 10th Place, Los Angeles, California (APN 5138-011-018 & -019*), dated December 31, 1997, soil vapor and soil samples were collected from 15 locations. The results of the soil vapor survey did not indicate the presence of detectable concentrations of VOCs. Most metals were detected at concentrations typical of soils in southern California. Elevated concentrations of copper (up to 3,980 mg/kg) and lead (up to 1,360 mg/kg) were detected in soil samples. SCS recommended additional investigation in the vicinity of these locations to further characterize the extent of copper and/or lead-impacted soils.

A second phase of investigation was completed in February 1998 as described in the report titled *Supplemental Soil Investigation Report, Sports Arena Complex Site, 746-750 West 10th Place, Los Angeles, California (APN 5138-011-018),* dated February 27, 1998. As part of this supplemental investigation, soil samples were analyzed for total copper, lead, nickel, zinc and pH. Copper, lead, nickel, and zinc were detected in all 18 analyzed samples: copper concentrations ranged from 21 to 250 mg/kg; lead concentrations ranged from 5.3 to 2,300 mg/kg; nickel concentrations ranged from 12 to 130 mg/kg; and, zinc concentrations ranged from 72 to 3,900 mg/kg. Soil pH values for the 18 soil samples were between 6.7 and 8.2. Based on the data from the two investigations, elevated concentrations of copper, lead, and zinc were present on the property. Remediation was recommended for the site.

Soil remediation activities were conducted in May and June 1999. Remediation consisted of excavation of approximately 620 tons of soil as described in *Report of Soil Remediation, Staples Arena Support Zone, Former Ready Property, 748 West 10th Place, (APN 5138-011-018), Los Angeles, California,* dated July 8, 1999. Impacted soil was excavated from the site with the oversight of the RWQCB and in accordance with the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California* dated December 30, 1998. Contaminant levels in final confirmation samples were below clean up goals established for the site. Excavated soil was transported to an off-site disposal facility under manifest.

Northeast Corner of 11th and Georgia Street – A review of records maintained by the City of Los Angeles Department of Public Works by SCS indicated the presence of an UST in the sidewalk adjacent to the western extent of the property. An investigation was recommended to assess potential releases of petroleum hydrocarbons from the UST. One boring was drilled at the location of the UST as indicated in the report titled *Phase II Investigation Report, Sports Arena Complex Site, NEC West 11th Street and South Georgia Street, Los Angeles, California (APN 5138-011-903),* dated January 15, 1998. No detectable concentrations of petroleum hydrocarbons or volatile aromatic hydrocarbons (benzene, toluene, ethylbenzene, and xylenes; BTXE) were detected in the sample. Based on these data, no further investigation was recommended.

737-825 West 11th Street – As indicated in the report *Phase II Investigation Report, Sports Arena Complex Site, 737-825 West 11th Street, Los Angeles, California (APN 5138-011-901 and -905),* dated January 13, 1998, trace concentrations of VOCs (less than 3.5 ìg/l) were detected during the soil vapor survey. Low concentrations (less than 725 mg/kg) of petroleum hydrocarbons were detected in soil matrix samples. With the exception of lead, metals were present in samples at concentrations, which are typical for soils in southern California. Lead was detected at concentrations ranging from 1.4 to 195 mg/kg. Although the highest concentrations of lead detected are above typical values, these concentrations are not anticipated to represent a significant health risk. Therefore, no further investigation was recommended.

Area-wide Soil Sampling and Groundwater Investigation – As required in the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California* dated December 30, 1998, near-surface soil samples were collected at various locations throughout the Block 2 (Olympic East Properties; also referred to as the "A" Phase in regulatory correspondence).

The results of near-surface soil sampling is provided in a letter report to the RWQCB titled *Site Confirmation Analytical Results and Request For Closure, Staples Arena Support Zone, "A" Phase, Los Angeles, California* dated July 14, 1999. SCS and RWQCB staff collected a total of 8 soil samples at locations throughout the area. Soil samples were analyzed for petroleum hydrocarbons, volatile organic compounds and California-regulated metals. Concentrations of these constituents were below established cleanup goals for the site.

Groundwater investigations were conducted within the Block 2 area as summarized in reports titled *Groundwater Sampling, Staples Arena Complex Site, Los Angeles, California* dated May 10, 1999 and *Groundwater Investigation, Staples Arena Support Zone, "A" Phase, Former Ready Property, 748 West 10th Place, Los Angeles, California* dated July 14, 1999. Groundwater samples were collected at three locations on the northern portion of the block in February 1999 at locations where remedial action had previously been completed. Groundwater was encountered at a depth of approximately 120 feet bgs. Samples were analyzed for total petroleum hydrocarbons, VOCs, pH, and selected metals. Results of the analyses indicated concentrations below Maximum Concentrations Levels for drinking water.

In June 1999, one additional borehole was drilled on the south side of Block 2, within the parcel where remediation had been completed (748 West 10th Place - APN 513 8-011-018). During the investigation, no groundwater was encountered in a boring drilled to a depth of 150 feet bgs. At the direction of the RWQCB, a soil sample was collected at the 150-foot depth and analyzed for California-regulated metals, total petroleum hydrocarbons, VOCs, and pH. Results indicated no detectable concentrations of petroleum hydrocarbons, trace concentrations of VOCs and metal concentrations, and pH within normal background levels. On August 6, 1999, the RWQCB issued closure for the surface soils. Within the letter, the RWQCB stated that contaminated soil within the area had been properly remediated. Final closure of deeper soil will be granted upon completion of vapor extraction activities

(iii) Olympic North Properties (Block 3)

On September 8, 1997, SCS prepared a Phase I Assessment for the subject property titled *Phase I Environmental Assessment Report, Olympic Properties North, Los Angeles, California.* At the time of the inspection in 1997, two motels, an automobile service station, and parking lots occupied the property. The results of that assessment indicated the potential for environmental concern on two properties. In December 1998, SCS conducted a Phase II investigation of the

property, the results of which are contained in the report titled *Phase II Investigation, Olympic Properties North, 901 and 931 West Olympic Boulevard, Los Angeles, California* dated January 22, 1999. The investigation consisted of collecting soil vapor samples at 17 locations and soil samples at 14 locations on parcels of concern. Analytical results of that investigation indicated the following:

- Lead concentrations in shallow soil exceeded the 50-mg/kg-cleanup goal established for the Project. Remediation of lead-contaminated soil was recommended.
- VOCs were not detected in soil vapor or soil samples collected during the investigation.
- Petroleum hydrocarbons were detected at concentrations below clean-up goals established for the Project. Remediation was not recommended.

Based on the results of the Phase II Investigation, remediation of lead-impacted soil was recommended. Remediation activities and removal of subsurface structures were conducted in July and August 1999. As part of the remediation, approximately 126 tons of soil were excavated and disposed off-site. Remediation activities are summarized in a report titled *Report of Soil Remediation, Staples Arena Support Zone, Former Yu's Auto Repair, 931 West Olympic Boulevard, Los Angeles, California (APN 5138-005-018 and 5138-005-019),* dated August 17, 1999.

Shallow soil samples collected from the site on August 2, 1999 as requested by the RWQCB did not indicate the presence of petroleum hydrocarbons and volatile organics at concentrations above the limits of detection. Concentrations of heavy metals were within the range anticipated for background soils in southern California. Results of shallow soil sampling were presented in a letter report to the RWQCB from SCS dated August 17, 1999.

A groundwater sample was collected from the site on July 19, 1999 and analyzed as approved by the RWQCB. Groundwater was encountered at a depth of approximately 100 feet bgs. The results of the analysis indicated the presence of gasoline and diesel at 2.3 mg/l and 0.9 mg/l, respectively. BTEX were the only volatile organics detected in the groundwater at concentrations of 14, 7.2, 0.8, and 69 µg/l, respectively. Results of the groundwater investigation were summarized in a letter report submitted to the RWQCB on August 19, 1999.

On the basis of the reports submitted to the RWQCB, a letter approving soil closure was issued by the RWQCB dated September 13, 1999. On November 8, 1999, the RWQCB issued a letter, which requested that another round of groundwater sampling be conducted at a later date as a condition of issuing groundwater closure for the site. In accordance with the RWQCB letter, this sampling will be conducted at completion of vapor extraction, which is presently underway within Block 2.

(iv) Figueroa North Properties (Block 4)

This area is bounded to the north by the Variety Arts Center and parking lots, to the east by Flower Street, to the south by Olympic Boulevard, and to the west by Figueroa Street. In 1997, SCS completed a Phase I Environmental Assessment of this area titled *Phase I Environmental Report Figueroa Properties North, Los Angeles, California,* dated August 6, 1997. The Figueroa Properties North under discussion in this report consists of APN 5138-002-007, -020, and -024.

At the time of the 1997 assessment, these parcels were being used as parking lots for the Variety Arts Center. No items of environmental concern were noted on the subject parcels. Two UST fill ports, however, were noted in front of the Variety Arts Center just to the northwest of parcel APN 5138-002-020. Prior uses identified for the subject parcels included residences, office buildings, a hotel, stores, restaurants, and parking lots. No potential environmental concerns were noted in the prior property uses.

No further investigations were recommended for the subject parcels, although an investigation was recommended relative to the UST fill ports on the adjacent parcel. No investigation has been performed to date. This adjacent parcel is not part of the subject Property.

(v) Figueroa Central Properties (Block 5)

This area is bounded by 11th Street on the north, South Flower Street on the east, 12th Street on the south, and South Figueroa Street on the west. This area was included in the Phase I Assessment completed by BAS dated October 4, 1996 titled *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California* and was identified as "Area 4." At the time of the assessment, the property consisted of four lots, which included several buildings used by Bank of America as a case vault, underground vault structures, and parking areas.

In 1997, SCS conducted another ESA and the results of that assessment are provided in a report titled *Los Angeles Sports Arena and Entertainment Complex Support Site, Phase I Environmental Assessment Second Party Review* dated April 11, 1997. SCS recommended subsurface investigations for six properties. Phase II investigations were performed and the results are provided below.

1150-1160 South Figueroa Street – In December 1997, SCS conducted a Phase II investigation of the property, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1150-1160 South Figueroa Street, Los Angeles, California (APN 5138-015-001)* dated December 31, 1997. The investigation consisted of collecting soil vapor and soil samples at nine locations. No VOCs were detected in the soil

vapor samples. Petroleum hydrocarbons were detected in concentrations ranging up to 120 mg/kg. All metal concentrations were below clean up goals established for the Project. No further investigation was recommended.

1153-1157 South Flower Street – A review of the LAFD files for this address revealed that USTs were removed in 1978 and petroleum contamination was identified during a subsurface investigation completed in 1995. Pacific Environmental Group (PEG) identified gasoline-range hydrocarbons to a maximum concentration of 6,743 mg/kg on this lot. The VES remediation system utilizing three extraction wells was active from approximately October 1996 through March 10, 1997 when the system was shut down. In April 1997, PEG submitted a *Proposed Work plan for Confirmation Soil Borings* and received authorization to proceed from the LAFD.

Review of PEG's *Confirmation Soil Boring Results/Request for Case Closure* report dated May 26, 1997, revealed that three confirmation soil borings were drilled to a total depth of 45 feet bgs on April 7, 1997. These borings were placed in the area previously known to have the highest petroleum hydrocarbon concentrations. Results of PEG's soil testing found all samples except those at a sand and clay contact at approximately 35 to 40 feet bgs were non-detect for petroleum hydrocarbons as BTEX and methyl-tert-butyl ether (BTEX/MTBE). The highest concentrations of gasoline (up to 1,100 mg/kg), benzene (up to 330 µg/kg), toluene (up to 4,400 µg/kg), ethylbenzene (up to 15,000 µg/kg), and xylenes (up to 110, 000 µg/kg) were detected at a depth of approximately 35 feet in each hole. The May 1997 report also included a discussion of the low potential for mobility of gasoline and BTEX constituents in site soils, and information on the proximity and depth of the closest drinking water aquifer source. In a letter dated June 9, 1997, the LAFD stated "Based upon the information provided to date, this Department has determined that no further action is required at this time."

SCS completed an additional Phase II investigation that included the collection and analysis of soil vapor samples at several locations to verify the effectiveness of the vapor extraction remediation and to more fully characterize the site. In addition, soil samples were collected from three locations where elevated concentrations of petroleum hydrocarbons were detected to more fully define the vertical extent of the above-discussed remaining hydrocarbon-impacted soils. These results are summarized in SCS' report titled *Phase II Investigation, Sports Arena Complex Site, 1153-1157 South Flower Street, Los Angeles, California (A.P.N. 5138-015-009),* dated January 15, 1998. The findings of the Phase II investigation are summarized below:

- No VOCs were detected in soil vapor samples.
- Based on the findings of the Phase II investigation, gasoline and BTEX constituents seemed to be confined to a zone of soil between approximately 30 and 40 feet bgs.

These results appear similar to those previously reported for the site, upon which closure has been obtained by regulatory agencies.

The report concluded that petroleum hydrocarbons and volatile organic compounds were not detected at concentrations, which represent significant potential impacts to human health or the environment, and additional site investigation activities were not recommended.

1100 South Figueroa Street – In September 1999, SCS conducted a Phase II investigation of this lot, the results of which are contained in the report titled *Phase II Environmental Assessment Report, Bank of America Property, 1130 South Figueroa Street, Los Angeles, California (A.P.N. 5138-015-011 and 5l38-015-016)*, dated September 15, 1999. At the time of the Phase II investigation, this parcel was occupied by a single Bank of America building and paved parking areas. The investigation consisted of collecting soil samples from three borings drilled to a total depth of 20 feet bgs. No petroleum hydrocarbons were detected in the seven soil samples analyzed. The five-foot sample collected from each boring was also analyzed for VOCs and lead, arsenic, cadmium, chromium, and nickel. VOCs were detected in trace concentrations in one of the three soil samples analyzed for VOCs. Based on these results, no further investigation was recommended.

1132-1140 South Figueroa Street – In September 1999, SCS conducted a Phase II investigation of the southwest portion of this parcel, the results of which are contained in the report titled *Phase II Environmental Assessment Report, Bank of America Property, 1130 South Figueroa Street, Los Angeles, California (A.P.N. 5138-015-011 and 5138-015-016)*, dated September 15, 1999. At the time of the Phase II investigation this area was being used as a paved parking area for Bank of America employees. The investigation consisted of collecting soil samples from six borings drilled to a total depth of 20 feet bgs. No petroleum hydrocarbons were detected in the 18 soil samples analyzed. No VOCs were detected in the soil samples collected, and metal concentrations were consistent with typical background concentrations. SCS concluded that there had been no significant subsurface releases of petroleum hydrocarbons, VOCs, or metals. No further investigation was recommended.

1101 South Flower Street – In September 1999, SCS conducted a Phase II investigation of the northeast portion of this parcel where a gasoline service station had previously been located, the results of which are contained in the report titled *Phase II Environmental Assessment Report, Bank of America Property, 1130 South Figueroa Street, Los Angeles, California (A.P.N. 5138-015-011 and 5138-015-016)*, dated September 15, 1999. At the time of the Phase II investigation this area was being used as a paved parking area for Bank of America employees. The investigation consisted of collecting and analyzing soil samples. No petroleum hydrocarbons or BTEX were detected in the soil samples analyzed. Metal concentrations were consistent with typical background concentrations. SCS concluded that no further investigations were warranted.

1145 South Flower Street – In September 1999, SCS conducted a Phase II investigation of the southeast portion of this parcel where a gasoline service station had previously been located. The results of the investigation are contained in the report titled *Phase II Environmental Assessment Report, Bank of America Property, 1130 South Figueroa Street, Los Angeles, California (A.P.N. 5138-015-011 and 5138-015-016),* dated September 15, 1999. At the time of the Phase II investigation, this location contained an underground vault associated with Bank of America. Three borings were drilled to 40 feet bgs. Petroleum hydrocarbons and VOCs were not detected in soil samples analyzed. Metal concentrations were consistent with typical background concentrations. SCS concluded that no further investigation was warranted.

(vi) Figueroa South Properties (Block 6)

This area is bounded by 12th Street on the north, South Flower Street on the east, a vacant property formerly occupied by a Ford automobile dealership on the south, and South Figueroa Street on the west. This area was included in the Phase I Assessment completed by BAS dated October 4, 1996 titled *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California* and was identified as "Area 5." At the time of the assessment, the Figueroa South Properties consisted of seven lots. Property uses included parking (4 lots) and vacant commercial/warehouse buildings (three lots). Under current conditions, the property has been consolidated under one ownership and the property consists of one subterranean warehouse, a mechanical building, and stairway access structures.

In 1997, SCS conducted another ESA and the results of that assessment are provided in a report titled *Los Angeles Sports Arena and Entertainment Complex Support Site, Phase I Environmental Assessment Second Party Review* dated April 11, 1997. SCS recommended subsurface investigations for six properties. Phase II investigations were performed and the results are provided below.

1200-1206 South Figueroa Street – In December 1997, SCS conducted a Phase II investigation of the property, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1200-1206 South Figueroa Street, Los Angeles, California (APN 5138-025-001)* dated January 14, 1998. At the time of the Phase II investigation the site contained an unoccupied multi-story concrete building. A geophysical survey of the site identified two USTs. Based on the results of the Phase II Investigation, petroleum hydrocarbons, VOCs, and selected metals were not detected at concentrations, which represent significant potential impacts to human health and the environmental. SCS recommended removal of the two USTs.

In June 1999, SCS provided oversight for the removal of the two USTs, the results of which are contained in the report titled *Underground Storage Tank Closure Report, Staples Arena*

Support Zone, 1200 through 1206 South Figueroa Street, Los Angeles, California LAFD Permit No. 8108), dated July 8, 1999. The LAFD issued a letter on May 16, 2000, stating "contamination above the Department's action level exists at this site." However, concentrations detected beneath the tanks at 1200-1206 South Figueroa Street were below goals established by the RWQCB. On June 8, 2000, the RWQCB submitted a letter to the LAFD providing their interpretation of the soil data, concluding that the concentrations of total petroleum hydrocarbons, lead, BTEX, and MTBE were all below their guidelines. The LAFD has informed SCS that the LAFD will be issuing a revised letter consistent with that of the RWQCB in the near future.

1210-1216 South Figueroa Street – In December 1997, SCS conducted a Phase II investigation of the property to assess potential contaminants associated with former automotive service operations on the property. The results are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1210-1216 South Figueroa Street, Los Angeles, California (A.P.N. 5138-025-002),* dated January 12, 1998. The investigation consisted of collecting soil vapor and soil samples at seven locations. VOCs were not detected in the soil vapor samples. Petroleum hydrocarbons ranged as high as 512 mg/kg. Elevated lead levels were detected in one soil sample.

In June 1999, at the request of the RWQCB, the soil with the elevated lead was removed from the property. The results of this soil removal are contained in the report titled *Report of Soil Remediation, Staples Arena Support Zone, 1216 through 1220 South Figueroa Street, (A.P.N. 5138-025-002 and 5138-025-003); Los Angeles, California* dated July 13, 1999. No further remedial activities were recommended for this property.

1220-1230 South Figueroa Street – In December 1997, SCS conducted a Phase II investigation of the property, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1220 South Figueroa Street, Los Angeles, California (A.P.N. 5138-025-003),* dated January 9, 1998. At the time of the Phase II investigation, the site contained two unoccupied single-story brick and wood-frame buildings. The investigation consisted of collecting soil vapor and soil samples. VOCs were not detected in the soil vapor samples. Petroleum hydrocarbons were detected in concentrations ranging as high as 1,250 mg/kg. Metal concentrations were typical of soils in southern California. Further investigation was recommended to further assess concentrations of petroleum hydrocarbons detected on the site.

In February 1998, SCS conducted a supplemental investigation of the area where petroleum hydrocarbons had been detected. The results of the additional investigation are contained in the report titled *Supplemental Soil Investigation, Staples Arena Complex Site, 1220 South Figueroa Street, Los Angeles, California (APN 5138-025-003),* dated February 27, 1998. Three additional borings were completed to a maximum depth of 3.5 feet bgs. Petroleum hydrocarbon concentrations in the samples ranged as high as 185 mg/kg. A trace

concentration of PCE (6.6 µg/kg) was detected in one of the three soil samples analyzed for VOCs. Results of the investigation did not identify any soils that represented a significant threat to human health or the environmental. Remediation was recommended for the elevated concentrations of petroleum hydrocarbons detected at the site.

In June 1999, SCS removed petroleum-impacted soil found during Phase II and Supplemental investigations. The results of this soil removal are contained in the report titled *Report of Soil Remediation, Staples Arena Support Zone, 1216 through 1220 South Figueroa Street, (APN 5138-025-002 and 5138-025-003); Los Angeles, California* dated July 13, 1999. Stockpiled soil was removed and disposed of offsite under disposal manifests. No further remedial activities were recommended for this property.

1215 South Flower Street – In December 1997, SCS conducted a Phase II investigation of the southern portion of this lot, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1215 South Flower Street, Los Angeles, California (APN 5138-025-015),* dated January 12, 1998. At the time of the Phase II investigation, the southern portion of this lot was occupied by one single-story brick building with entrances obstructed due to four vertical feet of debris (including construction lumber, plastic, metal, ceiling panels, etc.). The investigation consisted of collecting soil vapor and soil samples at four locations immediately north and south of the outside of the building. No VOCs were detected in the soil vapor samples. Petroleum hydrocarbons were detected in concentrations ranging as high as 438 mg/kg. Metal concentrations were detected in site soils were typical of soils in southern California. All detected concentrations were not anticipated to represent a significant risk to human health or the environment. Based on these results, no further investigation was recommended.

1237 South Flower Street – In December 1997, SCS conducted a Phase II investigation of this lot, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1237 South Flower Street, Los Angeles, California (APN 5138-025-010),* dated January 13, 1998. At the time of the Phase II investigation, this lot was used as a gravel and asphalt-paved parking area of Family Ford. The investigation consisted of collecting soil vapor and soil samples at four locations. No VOCs were detected in the soil vapor samples. Petroleum hydrocarbons were detected in concentrations ranging as high as 322 mg/kg. Metal concentrations were detected in site soils were background levels. All detected concentrations were not anticipated to represent a significant risk to human health or the environment. Based on these results, no further investigation was recommended.

Closure of Figueroa South Properties – As part of site closure agreed upon with RWQCB, SCS attempted to collect a groundwater sample from the Figueroa South Properties (at that time known as Phase "B" or Area "B"). On June 15, 1999, one soil boring was completed to 150 feet bgs. The soil boring was located on the eastern portion of 1220 South Figueroa

Street (APN 5138-025-003) lot. No groundwater was encountered. Drilling details are summarized in a letter titled *Groundwater Investigation, Staples Arena Support Zone, 1220 South Figueroa Street, (APN 5138-025-003); Los Angeles, California* dated July 27, 1999.

As part of the closure, SCS collected one "clearance" soil sample from 10 inches bgs in the 1220 South Figueroa Street (APN 5138-025-003) lot as requested by the RWQCB. This soil sample was analyzed for total lead. The sample contained 79 mg/kg of lead. To further assess potential impacts to the lot from lead, the sample was analyzed for soluble lead. The Soluble Threshold Limit Concentration (STLC) result was 1.1 mg/kg of soluble lead. It was concluded that lead in surface soils at the site does not represent a potential threat to groundwater. This information is summarized in SCS' letter titled *Request for Site Closure, Staples Arena Support Zone, Area "B", 12th Street and South Figueroa Street, Los Angeles, California,* dated August 23, 1999. Area B is defined as APNs 5138-025-001, -002, -003, -008, -010, -011, and -015. These parcel numbers correlate to 1200 through 1220 South Figueroa Street and 1201 through 1251 South Flower Street, Los Angeles.

On September 3, 1999, the RWQCB issued a letter titled "Approval of Site Closure, Staples Arena Support Zone, Phase B Area, Los Angeles California (File No. 99-007)." This letter states that no further remedial action is required for Phase B (Figueroa South Properties).

The *Updated EA Report* identified numerous subsurface investigations and soil remediation projects that have been performed throughout the six areas of the Project site. Phase II investigations were performed in six potential properties of concern in the Olympic West Properties (Block 1) area and in 13 properties of concern in the Olympic East Properties (Block 2) area. Soil remediation was performed in Olympic North Properties (Block 3) area. A Phase II subsurface investigation in the Figueroa North Properties (Block 4) area revealed no risk to human health or the environment. Phase II investigations were performed in six potential properties of concern in the Figueroa Central Properties (Block 5) area, and six Phase II investigations were performed in potential properties of concern in the Figueroa South Properties (Block 6) area.

In summary, all six areas of the Project site were evaluated during the performance of the *Updated EA Report*. Phase II investigations were performed on those properties that required further evaluation. On those parcels where significant concentrations of contaminants were detected, further investigations and/or remedial activities were conducted under the oversight of the RWQCB and LAFD. To date, closures have been granted for all of these properties with the exception of three remaining properties. These three potential properties of concern are shown on Figure 40 on page 330.

- **Figueroa South Properties (Block 6), 1240 South Figueroa Street** (APN 5138-025-004). Historical information for one parcel at the southwest corner of Figueroa South indicates past use for automobile sales and repair. A Phase II investigation

was performed for this property.[51] This investigation focused on the potential for subsurface releases of petroleum hydrocarbons and volatile aromatic compounds and the presence of metals associated with past site operations. A total of five borings were drilled throughout the Project site. The laboratory analysis of the borings concluded that arsenic, cadmium, chromium, lead and nickel are within background concentrations anticipated for soils in this area. Petroleum hydrocarbons and MTBE were not detected above laboratory detection limits in any of the soil samples analyzed. In summary, low levels of gasoline related constituents were detected in samples taken at this location. Based on the results of the investigation, there are no indications of significant subsurface releases of petroleum hydrocarbons or volatile hydrocarbons associated with automobile sales, repair, or the garages, which previously occupied this portion of the Project site. Furthermore, concentrations of metals and pH values for the soil beneath this location are generally within background levels anticipated for this area.

- **Olympic East Properties (Block 2), 844 West Olympic Boulevard** (APN 5138-009-002). Gasoline-impacted soil was identified on one parcel on the north side of Olympic East Properties. Soil remediation via a vapor extraction system currently is in operation under the auspices of the RWQCB. The system will operate until approximately April 2001, at which time a confirmatory investigation of soil and groundwater will be completed as approved by the RWQCB.

- **Olympic North Properties (Block 3), 931 West Olympic Boulevard** (APN 5138-005-018 and 5138-005-019). Due to the presence of detectable concentrations of gasoline-related constituents in a groundwater sample collected from the southwest corner of Olympic North, the RWQCB has requested that a groundwater investigation be conducted. This would be concurrent with the confirmatory investigation to be completed for the vapor extraction system in the Olympic East Properties.

2. PROJECT IMPACTS

(a) Significance Thresholds/Methodologies

Impacts related to soil contamination are significant if Project construction would occur prior to remediation of listed hazardous material/waste sites, sites of potential concern, or sites,

[51] *"Phase II Environmental Assessment Report, LA Sports and Entertainment District, 1240 South Figueroa Street, Los Angeles, California (A.P.N. 5138-025-004)", SCS Engineers, December 2000.*

Figure 40 Properties With Ongoing Remedial Investigations

which exceed maximum regulatory requirements for hazardous materials.[52] Groundwater contamination would be significant if caused by the on-site release of hazardous materials, or if contaminated groundwater were encountered during excavation/construction of the project and not remediated in accordance with applicable regulations. Impacts related to asbestos or lead-based paint in existing buildings on-site would be significant if demolition of any structures found to contain such materials would occur prior to appropriate stabilization and/or removal of the materials in accordance with applicable regulations.

(b) Analysis of Project Impacts

(i) Construction

Additional excavation and ground clearing on any of the potential properties of concern identified above and shown in Figure 40 may have the potential to disturb soil and/or groundwater contaminants. Such disturbance and potential release of such contaminants to the air could pose potential health risks and thus a significant impact to construction workers and employees, residents and visitors adjacent to the Project site. A mitigation measure has been included to reduce this potentially significant impact to a level of insignificance.

Based on the results of the methane sampling program, no further investigation of subsurface methane accumulations is recommended or warranted. As such, potential impacts attributable to subsurface methane accumulations are concluded to be less than significant.

The demolition of the two remaining structures in the Figueroa Central Properties with asbestos containing materials or lead-based paint would have the potential to release these substances into the atmosphere if these substances are not properly stabilized or removed prior to demolition activity. This could result in a significant impact. A mitigation measure has been included to reduce this potentially significant impact to a level of insignificance.

(ii) Operation

Operation of the Project and ancillary facilities would involve the use of small quantities of such potentially hazardous materials as solvents, detergents, and petroleum products. All potentially hazardous materials would be stored, handled, and disposed of in accordance with all applicable federal, state, and local regulations. Consequently, the Project operation would not be expected to pose any significant risks related to the accidental release of hazardous materials. Based on the

[52] *These "maximum regulatory requirements" are not defined here because they are site specific (i.e., determined during the "further investigations" required by mitigation in this section).*

results of the methane sampling program, no further investigation of subsurface methane accumulations is recommended or warranted. Operational impacts would be less than significant.

3. MITIGATION MEASURES

The following mitigation measures shall be employed during construction of the proposed Project:

1. Further investigation by a registered environmental professional of the potential soil and/or groundwater contamination on 1240 South Figueroa Street (APN 5138-025-004), 844 West Olympic Boulevard (APN 5138-009-002), and 931 West Olympic Boulevard (APN 5138-005-018) shall be conducted in accordance with the RWQCB, where applicable. Any required remedial action recommended by the registered environmental professional and approved by the RWQCB for any contamination discovered during these investigations shall be fully implemented and documented.

2. Coordination of ongoing remediation activities with proposed Project construction shall be performed to ensure that soil cleanup is not stopped or impeded.

3. Removal of any asbestos-containing materials found in the only two site structures (Figueroa Central Properties) shall be conducted in accordance with the requirements of South Coast Air Quality Management District Rule 1403. Specific requirements of Rule 1403 include:

    a. Implementation of a thorough survey of the affected facility prior to issuance of permits for any demolition or renovation activity, including inspection, identification, and quantification of all friable and certain non-friable asbestos-containing materials.

    b. Surveys which include collection and analyses of representative asbestos building material samples, and quantification of these materials for asbestos abatement purposes prior to or during demolition.

    c. Notification of the SCAQMD of the intent to demolish or renovate any facility at least ten days prior to commencing with the activity.

    d. Removal of all asbestos-containing materials prior to any demolition or renovation activity that would break up, dislodge, or similarly disturb the material.

    e. Use of prescribed procedures when removing asbestos-containing materials.

    f. Placement of all collected asbestos-containing materials in leak-tight containers or wrapping.

g. Transportation and disposal of asbestos-containing materials as required by applicable regulations.

4. Lead-based paint assessments of the only two remaining structures on the Project Site (Figueroa Central Properties) shall be conducted prior to issuance of permits for any demolition activity involving a particular structure. These assessments will include use of x-ray fluorescent technology to identify buildings with lead-based paint. Lead-based paint found in any buildings shall be removed and disposed of as a hazardous waste in accordance with all applicable regulations.

5. In the event that previously undiscovered contaminated soil or hazardous materials are encountered at the Project site during construction, identification and remediation procedures shall be developed in accordance with applicable federal, State and City regulations to ensure that the potential for the risk of upset would be below a level of significance.

4. ADVERSE EFFECTS

After the incorporation of mitigation measures, no adverse impacts from hazardous materials would occur.

5. CUMULATIVE IMPACTS

For related projects, remediation of any significant soil or groundwater contamination on previously or currently developed sites in the downtown area would generally be required prior to development of the sites. This remediation activity would be expected to result in a long-term improvement in the condition of soils and groundwater in the area, with a consequent reduction in potential health hazards. No significant cumulative impacts are anticipated.

Asbestos and lead-based paint is likely to be present in older buildings in the downtown area. As with the proposed Project, all demolition and renovation activity associated with the related projects would be conducted in full compliance with the requirements of SCAQMD Rule 1403. Compliance with these regulatory requirements would minimize the potential for an accidental release of asbestos. If lead-based paint is suspected to be present in any structures targeted for demolition associated with related project development, appropriate evaluation and, if necessary, remediation would be conducted to provide for the abatement of dust and the safety of workers. The potential for cumulative impacts related to accidental releases of asbestos or lead-based paint would therefore be less than significant.