# IV. ENVIRONMENTAL IMPACT ANALYSIS F. HAZARDS AND HAZARDOUS MATERIALS 1. ENVIRONMENTAL SITE ASSESSMENT

Except where footnoted otherwise, this Section is based upon the analysis and conclusions of the following technical reports, which are incorporated as Appendix E to this Draft EIR:

- Preliminary Site Assessment Report, 12333 West Olympic Boulevard and 1901, 1925 & 1933 Bundy Drive, AGI Properties, Inc., Los Angeles, CA 90064, (the "Previous Preliminary Site Assessment Report"), prepared by Glenfos, Inc. June 26, 1995;
- <u>Phase II Investigation Report, 12333 West Olympic Boulevard and 1901, 1925 & 1933</u> <u>Bundy Drive, AGI Properties, Inc., Los Angeles, CA 90064</u>, (the "<u>Previous Phase II</u> <u>Investigation Report</u>"), prepared by Glenfos, Inc., September 6, 1995;
- <u>Phase II Soil Assessment, 12333 West Olympic Boulevard and 1901, 1925 & 1933 Bundy</u> <u>Drive, AGI Properties, Inc., Los Angeles, CA 90064</u>, (the "<u>Previous Phase II Soil</u> <u>Assessment</u>"), prepared by Glenfos, Inc., February 15, 1996;
- <u>Supplemental Investigation of VOCs, 12333 West Olympic Boulevard, AGI Properties, Inc.</u>, prepared by Glenfos, Inc., March 2000;
- <u>Twelfth Quarterly Sampling (March 2004)</u>, <u>12333 West Olympic Boulevard</u>, <u>Westside Medical Park</u>, prepared by Glenfos, Inc., March 2004;
- <u>Phase I Environmental Site Assessment, Westside Medical Park, 1901, 1925, & 1933 South</u> <u>Bundy Drive, Los Angeles, California</u> (the "<u>Phase I ESA</u>"), prepared by Environmental Resources Management, September 2004;
- <u>Phase II Site Investigation Report, Westside Medical Park, West Los Angeles, California</u> (the "<u>Phase II Report</u>"), prepared by Environmental Resources Management, September 9, 2004;
- <u>Phase II Addendum</u>, Westside Medical Park, 12333 Olympic Boulevard, West Los Angeles, <u>California</u> (the "<u>Phase II Addendum</u>"), prepared by Environmental Resources Management, September 10, 2004;
- <u>Remedial Action Plan</u>, Westside Medical Park Bundy Parcel, Los Angeles County, <u>California</u> (the "<u>Remedial Action Plan</u>"), prepared by Environmental Resources Management, April 22, 2005;
- <u>Asbestos Operations & Maintenance Program, 1901, 1925 and 1933 S. Bundy Drive, Los Angeles, California</u> (the "<u>Asbestos Program</u>"), prepared by Allstate Services Environmental, Inc., November 17, 2005;

- <u>Asbestos Sampling Report at 1933 South Bundy Drive, Los Angeles, California 90025</u>, (the "<u>Asbestos Report</u>"), prepared by Allstate Services Environmental, Inc., January 31, 2006;
- <u>System Progress Report, Westside Medical Park Bundy Parcel, Los Angeles County,</u> <u>California</u> (the "<u>System Progress Report</u>"), prepared by Environmental Resources Management, January 10, 2007;
- <u>No Further Requirements For Soil Only-Westside Medical Park-Bundy Parcel</u>, 1901, 1925, & <u>1933 Bundy Drive</u>, Los Angeles, California (SCP No. 0850B; Site ID No.2046M00), prepared by the California Regional Water Quality Control Board, May 27, 2008;
- <u>Limited Lead Based Paint Inspection Commercial Building(s)</u> 12333 Olympic Boulevard <u>West Los Angeles, California 90064</u> (the "<u>Lead Survey</u>"), prepared by American Environmental Group, Inc., September 7, 2008; and
- <u>Limited Asbestos Survey Report Commercial Building(s) 12333 Olympic Boulevard West</u> <u>Los Angeles, California 90064</u> (the "<u>Asbestos Survey</u>"), prepared by American Environmental Group, Inc., September 7, 2008.

# **ENVIRONMENTAL SETTING**

# **Existing Project Site**

The 11.55-acre (503,205-square-foot) project site is located north of Olympic Boulevard, between Bundy Drive and Centinela Avenue in the City of Los Angeles. Nebraska Avenue is located one block north of the project site. The project site is developed with four structures and a surface parking area. The existing structures include a 166,283-square-foot single-floor office, research and development, and manufacturing/assembly facility located at 12333 Olympic Boulevard that provides approximately 29,600 square feet of office space, 42,942 square feet of research and development space, and 93,741 square feet of manufacturing/assembly space, and three single-floor office buildings located at 1901, 1925 and 1933 Bundy Drive, that provide approximately 30,000, 20,000, and 34,000 square feet of office floor area, respectively. All three single-floor office buildings are located along Bundy Drive between La Grange Avenue and Missouri Avenue. The 12333 Olympic Boulevard building is located west of the Bundy Drive buildings and is separated by a surface parking area, extending south in an L-shape configuration to Olympic Boulevard.

# **Existing Surrounding Uses**

The project site is located in a highly urbanized west Los Angeles community. The project area is generally characterized by a mix of commercial, industrial, and low- to medium-density residential uses, with a concentration of commercial uses near the transit corridors of Olympic Boulevard and Bundy Drive. The project site is bounded by surface parking and one- to two-floor commercial and light

industrial buildings to the north, followed by one- and two-floor single-family residences across Nebraska Avenue. The Parcel A portion of the project site is bounded Bundy Drive to the east, across which are multi-family residences, a City of Los Angeles animal shelter, Bally's Total Fitness gym, and the nine-floor Cornerstone Plaza office building. Parcel B is bounded by the Tribecca West office buildings to the east. Parcel A is bounded to the south by an adjacent television studio followed by a Cadillac auto dealership and service shop, while Parcel B is bounded by Olympic Boulevard to the south. The project site is bounded by the VCA Antech animal hospital and a City of Los Angeles Department of Water and Power (LADWP) electrical distribution facility to the west.

# Sensitive Receptors

Surrounding uses that would be considered sensitive receptors with respect to hazardous material exposure (i.e., areas with potential to contain children under 14, the elderly over 65, or the sick/disabled), in order of proximity, would include the following:

- within 500 foot radius: single-family residences located one block north of the project site on the north side of Nebraska Avenue between Bundy Drive and Stanford Avenue;<sup>1</sup>
- within 500 foot radius: multi-family residences located east of the project site along the east side of Bundy Drive between Nebraska Avenue and Missouri Avenue;
- within 500 foot radius: single-family residences located east of the project site along the north side of Missouri Avenue between Bundy Drive and Brockton Avenue; and along both sides of Brockton Avenue between Missouri Avenue and Nebraska Avenue;
- within 0.25 mile radius: New Roads High School (a private school for grades 9-12), located at 3131 W. Olympic Boulevard (approximately 0.18 mile from the project site).<sup>2</sup> While New Roads High School is already in full operation, this school is included as Related Project No. 49 in Table III-1, Related Project List, provided in Section III (Environmental Setting), in association with an expansion project planned over the next few years; and
- within 0.25 mile radius: Stoner Playground and Recreation Center, located at 1835 Stoner Avenue (approximately 0.18 mile from the project site).

<sup>&</sup>lt;sup>1</sup> While most homes in this neighborhood are located over 500 feet from the project site, a few residential properties are located just within 500 feet of the project site.

<sup>&</sup>lt;sup>2</sup> New Roads School, Home, website: http://www.newroads.org/, July 19, 2006.

While the following schools are located just over 0.25 mile from the project site, these schools are also identified as sensitive receptors for the purpose of this analysis:

- just over 0.25 mile radius: Wildwood School Secondary Campus (a private school for grades 6-12), located 11811 W. Olympic Boulevard (approximately 0.34 mile from the project site);<sup>3</sup> and
- just over 0.25 mile radius: Westview School (a private school for grades 6-12), located at 2000 Stoner Avenue (approximately 0.32 mile from the project site).<sup>4</sup>

In addition, the future residents of the proposed project would be sensitive receptors.

All other known existing and proposed schools, homes, senior homes, and hospital projects in the project area with the potential to house sensitive receptors (including Related Project Nos. 1, 12, 38, 39, 46, and 56 in Table III-1 in Section III) are located at least 0.25 mile from the project site and thus are not identified as sensitive receptor locations for the purpose of this analysis.<sup>5</sup>

# Topography

Based on previous investigations summarized in the <u>Phase I Environmental Site Assessment, Westside</u> <u>Medical Park, 1901, 1925, 1933 South Bundy Drive, Los Angeles, California</u> (the "<u>Phase I ESA</u>"), prepared by Environmental Resources Management, September 2004, the project site is located in the western portion of the Los Angeles County Coastal Plain. The Coastal Plain is characterized by a deep northwest trending depositional basin bounded to the northeast by the Puente Hills and Whittier faults, to the southwest by the Newport-Inglewood fault zone, and to the southeast by the Santa Ana Mountains. Previous reports observed the project site's topographic elevation to be approximately 162 feet above

<sup>&</sup>lt;sup>3</sup> Wildwood School, Home, website: http://www.wildwood.org/index.asp, July 19, 2006.

<sup>&</sup>lt;sup>4</sup> The Westview School, Home, website: http://www.westviewschool.com/index.htm, July 19, 2006.

<sup>&</sup>lt;sup>5</sup> Existing LAUSD schools provided by: Los Angeles Unified School District, Local School District map, April 2006, website: http://notebook.lausd.net/pls/ptl/docs/PAGE/CA\_LAUSD/LAUSDNET/DISCOVER/MAPS/ 2006\_LOCAL\_DISTRICTS\_INDEX\_V2.PDF, March 8, 2007; proposed LAUSD schools provided by: Los Angeles Unified School District, Facilities Services Division, New Construction 2007 Strategic Execution Plan, January 2007, website: http://www.laschools.org/sep/pdf/sep-2007-web.pdf, March 8, 2007; existing SMMUSD schools provided by Santa Monica-Malibu Unified School District, Home, website: http://www.smmusd.org/, March 8, 2007; proposed SMMUSD schools not currently available as Facilities Master Plan is being updated; review for other existing and proposed private schools, playgrounds, hospitals, and retirement homes based on Table III-1, Related Projects List in Section III., Environmental Setting, and by observations conducted during site visits.

mean sea level (msl). The topography of the project site is generally flat with a slight south southwesterly slope.

#### Soils and Hydrology

The <u>Phase II Site Investigation Report</u>, Westside Medical Park, West Los Angeles, California (the "<u>Phase II Report</u>"), prepared by Environmental Resources Management in September 9, 2004 identified alternating layers of silty to clayey sands and sands with gravel to a depth of approximately 35 to 40 feet below ground surface (bgs), at which depth a confining layer of clayey silt is encountered. Based on previous investigations summarized in the <u>Phase I ESA</u>, these soils are underlain by marine and non-marine terrace deposits of the Lakewood Formation. The most recent borings conducted at the project site in December 2006 discovered water at a depth of approximately 37 feet bgs.<sup>6</sup> This is consistent with previous reports summarized in the <u>Phase I Report</u> and borings conducted as part of the <u>Phase II Report</u> that encountered groundwater at the project site at depths ranging between approximately 33 and 44 bgs. The nearest open body of water to the project site is almost entirely covered with impermeable surfaces. The <u>Phase I ESA</u> observed that storm water from the project site is gravity-fed via a man-made engineered slope which drains towards the south, where stormwater enters catch basins at the paved surface parking lot and is directed to off-site City of Los Angeles municipal storm drains in Bundy Drive.

#### Historic Use of Project Site and Surrounding Properties

The <u>Phase I ESA</u> included a review of the following sources to determine potential areas of concern that may be associated with the historic uses of the project site and the surrounding properties. These sources included the following:

- Interviews with Mr. Sonny Miks, a long-time employee with Teledyne Controls' Construction and Facilities Department;
- Interviews with Ms. Lori Garcia, employee with the current property owner Westside Medical Park, LLC;
- Interviews with Ms. Louise DelMage, employee with former property owner AGI Properties;
- USGS Topographic Maps from 1902, 1915, 1934, 1966, 1972, 1981, 1994, and 1995;
- City Directory Abstract 1920 to 2003;

<sup>&</sup>lt;sup>6</sup> Geotechnologies, Inc., Preliminary Geotechnical Engineering Investigation, Proposed Medical Office Buildings and Mixed-Use Development, 12233 Olympic Boulevard and 1901 to 1933 Bundy Drive, Los Angeles, California, February 7, 2007. See Appendix D to this Draft EIR.

- Historic aerial photographs from 1928, 1947, 1952, 1965, 1976, 1989, 1994, and 2002; and
- Building permit applications 1949 to 2000.<sup>7</sup>

Sanborn fire insurance maps were not available to review for the project site or surrounding properties.

#### Historic Uses of Project Site

Based on the various sources listed above, the <u>Phase I ESA</u> provided an overview of historic uses on the project site. As discussed previously, the entire project site is owned by Westside Medical Park, LLC, who bought the property in 2003.

The project site was primarily used for agriculture from as early as 1902, with some small structures (possibly homes and/or barns) also located on-site up until at least 1947. The 1901 Bundy Drive building on the project site was constructed in 1950; the 1925 and 1933 Bundy Drive buildings were constructed in 1953. All three buildings are single-floor brick structures with concrete floors and exposed wood-frame ceilings. The three office buildings on the project site were reportedly all connected at one time, and although at one time used for manufacturing, all of the buildings appear to have been used more recently as office space for the adjacent television studio, which vacated the structures in 2003. Other former property owners for these structures have included AGI Properties, Teledyne Controls, and Packard Bell. The three buildings are leased to G4 Media and Amp'd Mobile. The existing on-site office, research and development, and manufacturing/assembly facility located at 12333 Olympic Boulevard was constructed in 1949 and until recently was occupied by Teledyne Controls, a designer and manufacturer of avionics and ground-related electronic systems. Packard Bell also previously utilized this structure. The Preliminary Site Assessment Report, 12333 West Olympic Boulevard and 1901, 1925 & 1933 Bundy Drive, AGI Properties, Inc., Los Angeles, CA 90064 (the "Previous Preliminary Site Assessment Report"), prepared by Glenfos, Inc., June 26, 1995, stated that these operations have historically involved the storage and use of various hazardous chemicals such as paints and solvents, and generated large quantities of hazardous waste. The following is a brief description of the history of each of the on-site buildings, based on information provided in the Phase I ESA and Previous Preliminary Site Assessment Report.

# 1901 Bundy Drive Building

The 1901 Bundy Drive building was constructed in 1950 and was used through 1958 for electronics manufacturing and storage. Between 1950 and 1970, the building was owned by Mr. Richard Kite, Grifillan Bros Inc., and Packard Bell, who manufactured Navy testing equipment and electronics such as radios and televisions. By 1970, the building was owned and operated by Teledyne Controls who

<sup>&</sup>lt;sup>7</sup> This source was only reviewed for the project site but not for surrounding properties.

reportedly discontinued use of the building for manufacturing, and used the building for office and warehousing until the early to mid 1990s. By 1996, Teledyne Controls sold the property to AGI Properties, who leased the space to the adjacent television studio. Based on information provided by Mr. Sonny Miks, a long-time employee with Teledyne Controls' Construction and Facilities Department, this building may have been used to manufacture calculators in the late 1950s.

# 1925 Bundy Drive Building

The 1925 Bundy Drive building was constructed in 1952 for electronics assembly.<sup>8</sup> At the time, the building was owned by Fortune Investment Company and was leased to Packard Bell for warehousing activities only, and later in 1955 for office space. By 1982, the building was owned and operated by Teledyne Controls who continued to utilize the space for office activities until 1990. In 1993, Argonaut Insurance Group was listed as the property owner and the building was used for office space. From 1997 to 2000, the building was owned by AGI Properties, Inc., who leased the office space to the adjacent television studio. Mr. Miks stated that this building was once referred to as the "trading post" due to the public buying and selling of electronics parts that occurred there at one time.

# 1933 Bundy Drive Building

The 1933 Bundy Drive building constructed in 1953 and was owned and operated by Packard Bell for manufacturing from 1953 to the early 1960s. By 1977, Teledyne Controls had purchased the building for use as office and warehouse space until the early 1990s. By 1993, Argonaut Insurance Group had purchased the property from Teledyne Controls. AGI Properties, Inc. owned the building from approximately 1996 until 2003, during which time the building was leased to the adjacent television studio for office space.

# 12333 Olympic Boulevard Building

The 12333 Olympic Boulevard building was originally constructed in 1949.<sup>9</sup> The historic uses of the building were researched as part of the <u>Previous Preliminary Site Assessment Report</u>. The 12333 Olympic Boulevard building was occupied by Packard Bell Company Television, Packard Bell Computer, and Packard Bell Electronics until approximately 1975 when it was sold to Teledyne Controls, who, until recently, continuously occupied the structure. Based on a review of building permits for this structure, past activities at this structure included the manufacture of radios and televisions, the storage of paints and solvents, the use of an incinerator, the use of a metal "shaving bin, and the use of boilers (using various types of fuel hydrocarbons).

<sup>&</sup>lt;sup>8</sup> Christopher A. Joseph & Associates, Olympic and Bundy Historic Resources Report, December 2006. (See Appendix B to this Draft EIR.)

<sup>&</sup>lt;sup>9</sup> Ibid.

#### Former On-site Structures

Based on historical aerial photographs of the project site, three additional buildings were constructed on the southwest portion of the project site between the early 1950s to mid 1960s. These buildings, which were located in between the 1901, 1925, and 1933 Bundy Drive buildings and the 12333 Olympic Boulevard building, were used for manufacturing activities by Teledyne Controls, and possibly Packard Bell, and remained until the late 1970/early 1980s. Mr. Miks stated that one of the former buildings located behind the 1933 building was used to store chemicals; this building reportedly burned down approximately 20 years ago. Mr. Miks also stated that former manufacturing activities at the project site included use of the exterior property as a lumberyard and finishing area. After removal of these former structures, the southwest portion of the project site was paved with parking and a materials/storage area.

#### Historic Surrounding Uses

#### Historic Land Uses

The <u>Phase I ESA</u> provided an overview of historic uses on the surrounding properties. As of 1928 the land uses surrounding the project site were primarily agricultural, except for greenhouses on the property to the north, and one graded and subdivided property to the southeast. By 1947, the property to the north and northeast across Nebraska Avenue and Bundy Drive contained residential land uses, the property to the southeast contained a drive-in movie theatre (which remained until at least 1966), industrial uses were located farther southeast across Olympic Boulevard. Land uses to the east and south remained in agriculture and greenhouses remained on the property to the north. By 1952, the land to the west of the project site was developed with office and/or light industrial facilities and agricultural land remained to the southwest. By 1965, the agricultural land to the southwest was replaced with office buildings and two large above-ground storage tanks (ASTs) were located on the property southwest of the project site. By 1976 the property to the southeast was developed with an office/industrial building, multi-tenant office and industrial buildings were developed to the west, and the greenhouses to the north were removed leaving that property vacant. Industrial growth continued to the north and south. By 1989, the ASTs on the property to the southwest had been removed and that property was in use as a storage yard. Additional office buildings were constructed to the southeast and to the north, including the adjacent television studio.

# Historic Tenants

Neighboring tenants along Bundy Drive between 1920 and 2000 included: the Los Angeles Public Library (1920 to 1950); private residents and the Olympic Trailer Court (1920 to 1970); Swain Back Hoe Rentals (1950-1970); United Continental Development Court, Bomaine Corporation, Diagnostics Imaging/Medical Group, Interport Trading Company, E-Systems, Instamall, Bundy Drapery Cleaners, and Brent Air Tow (1970 to 2000); and Harrison Enameling (1920 to 2000). Neighboring tenants along Olympic Boulevard between 1920 and 2000 included: Olympic Drive-In Theatre/Pacific Drive-In Theatre Corp. and Riggins Café (1950-1970); Union Oil Dealer, Autobahn Precision Tooling, Abes

Unocal, Martin Cadillac, Los Angeles Telephones, Martin Service and Body Shop, Martin Motors Leasing and Cadillac Sales, private residences, Atkinson-Hoops-Gardiner Associates, National Homes Architecture, and Hudson Joseph & Associates (1970-2000).

#### Potential Environmental Concerns at Project Site

#### Project Site Reconnaissance

The <u>Phase I ESA</u> included site reconnaissance for hazardous materials and substances at and surrounding the project site that include the 1901, 1925, and 1933 Bundy Drive buildings. The following is a list of observations made during the site reconnaissance conducted on August 12, 2004:

- A former swimming pool is located adjacent to the existing on-site 12333 Olympic Boulevard;
- Limited landscaping is located along the northeast side of the 1901, 1925, and 1933 Bundy Drive buildings;
- Three pad-mounted and fenced transformers are located to the southwest of the 1901 Bundy Drive building;
- A transformer station with pole-mounted transformers associated with the 12333 Olympic Boulevard building is located to the southeast of the 1933 Bundy Drive building within the paved parking area;
- Utilities such as natural gas, electricity, telephone, and water are provided to the project site. One gas line reportedly runs underground between the 1925 and 1933 Bundy Drive buildings, but is not in use. Irrigation water is discharged off-site to the City of Los Angeles municipal storm sewer system; and
- Electric power poles and pole-mounted transformers, manhole covers, light standards, padmounted transformers, conduit vaults, utility vaults, and a water pump (hook-up) for emergency fire suppression were also observed on the project site. The three existing office buildings reportedly have roof-mounted air-conditioning units.

None of the following were observed in or around the 1901, 1925, and 1933 Bundy Drive buildings during the site reconnaissance conducted as part of the <u>Phase I ESA</u> nor are they otherwise known to exist on the project site:

• No evidence of current or former use or storage of chemicals was observed inside or outside of any of the three former office buildings or in drums or ASTs;

- Based on information provided by Ms. Lori Garcia of Westside Medical Park, LLC and Ms. Louise DelMage of AGI Properties, there are no known underground storage tanks (USTs) containing hazardous chemicals or wastes associated with any of three former office buildings on the project site;
- No evidence of USTs such as fill or vent pipes was observed during the site reconnaissance at any of the three former office buildings;
- No hazardous waste is generated, stored, or handled at the project site;
- No evidence of leaks or spills in areas where waste materials may have been stored during former site operations was observed. Recent use of the three buildings for administrative activities likely restricted chemical use to general-purpose cleaners and maintenance chemicals;
- No evidences of strained or stressed vegetation was observed on the project site;
- There are no basements in any of the three former office buildings on the project site;
- The project site does not maintain an underground septic system;
- No mercury is used in storage in any of the three former office buildings;
- No wetlands are present on the project site or within a one-mile radius;
- There are no drinking water supply wells located at the project site; and
- There are no asbestos-containing material (ACM) known to exist in any of the three former office buildings.

The <u>Phase I ESA</u> did not include a site reconnaissance of the 12333 Olympic Boulevard building. However, a site reconnaissance of all four building existing on the project site was performed in 1995 as part of the <u>Previous Preliminary Site Assessment Report</u>. As part of this site reconnaissance observed the following within or around the 12333 Olympic Boulevard building:

- Teledyne Controls was operating in the 12333 Olympic Boulevard building at the time of the site reconnaissance. Activities conducted included aviation electronic manufacturing, circuit board assembly, and testing using thermal test ovens, computers, and vibration testers, and machining operations;
- Hazardous or toxic wastes were observed in a self-contained storage shed adjacent to the north side of the 12333 Olympic Boulevard building;

- One potential clarifier was observed along the northwest side of the 12333 Olympic Boulevard building;
- Several electrical transformers were observed within the 12333 Olympic Boulevard building, none of which are suspected to contain polychlorinated biphenyls (PCBs); and
- An air compressor room was observed adjacent to the northeast corner of the 12333 Olympic Boulevard building with an oil release that appeared related to the pressure relief system.

The <u>Previous Preliminary Site Assessment Report</u> did not observe any of the following within or around the 12333 Olympic Boulevard building: use of large quantities of hazardous waste; distinct odors; ASTs; USTs; spills or stains; stressed vegetation; or visible smoke, fumes, or dust.

# Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are mixtures of chlorinated compounds which can exist as vapor, oily liquids, or solids. PCBs have been used as coolants and lubricants in transformers and other electrical equipment because they do not burn easily and are good insulators. When PCBs leak into the air, water, and soil, they can result in skin rashes and liver damage in humans. PCBs are also likely carcinogens. In 1977 the U.S. government banned the production of PCBs.

As discussed above, the site reconnaissance conducted as part of the <u>Phase I ESA</u> observed three padmounted transformers owned and operated by LADWP located in the southwest parking lot, behind the 1901 Bundy Drive building. No labeling was evident to identify the transformers as non-PCB units. In addition, one pole-mounted transformer was observed in the southwest parking area. Environmental Resources Management contacted the LADWP concerning these units. According to LADWP, the transformers (No. 028-08-111) have not been tested for PCBs. Fluorescent light ballasts were observed throughout the building; however, these fluorescent light ballasts were not inspected for the presence of PCBs. Ms. DelMage reported that there are no known PCB-containing light ballasts in place at the facility.

# Asbestos-Containing Materials

Asbestos-containing materials (ACMs) are materials that contain asbestos, a naturally-occurring fibrous mineral that has been mined for its useful thermal properties and tensile strength. When left intact and undisturbed, these materials do not pose a health risk to building occupants. There is, however, potential for exposure when the ACM becomes damaged to the extent that asbestos fibers become airborne and are inhaled. These "friable"<sup>10</sup> ACMs can produce airborne fibers are carcinogenic and can cause lung

<sup>&</sup>lt;sup>10</sup> Friable ACM is defined as any material containing more than one percent asbestos. Friable ACM is more likely to produce airborne fibers than non-friable ACM, and can be crumpled, pulverized, or reduced to power by hand pressure. Non-friable ACM is defined as any material containing one percent or less asbestos. Nonfriable ACM cannot be crumpled, pulverized, or reduced to power by hand pressure.

disease. The principal federal government agencies regulating asbestos are the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (USEPA). The age of a building is directly related to its potential for containing elevated levels of ACMs. Asbestos was banned in most friable building materials (sprayed applied surfacing materials and thermal system insulation) in 1978, but the OSHA deems spray applied surfacing materials, thermal system insulation materials, and vinyl flooring materials as "presumed asbestos-containing materials" (PACMs) if they are present in pre-1981 buildings.

The OSHA PACM definition does not include all suspect ACMs; building materials, except for friable surfacing materials and thermal system insulation, have not been prohibited. In 1989, the USEPA published the Ban and Phase-Out Final Rule allowing a seven-year period to prohibit the future manufacturing, importation, processing, and distribution in commerce of most ACMs. However, this rule was partially overturned in 1992.

Generally, all untested materials are presumed to contain asbestos in buildings constructed prior to 1981. The USEPA recommends a proactive in-place management program be implemented wherever ACMs are found in a building; ACMs that are not damaged may remain in place. The USEPA also recommends that damaged ACMs be removed, repaired, encapsulated, or enclosed. Prior to any renovation or demolition activities, the USEPA recommends that all ACMs be removed.

OSHA requires buildings and/or property owners to identify the presence, location, and quantity of ACMs in structures built prior to 1981 if construction, alteration, repair, maintenance, renovation, or custodial activities are performed. Building and/or facility owners are required to communicate the presence, location, and quantity of ACMs to facility employees or subcontractors and/or building tenants.

As part of the project site reconnaissance conducted under the Phase I ESA, a visual inspection of ACMs in easily accessible areas was conducted; however, no samples were collected or analyzed. Floor tiles observed in building common areas such as hallways were identified as potential friable PACMs. The floor tiles were observed in good condition. ACMs may also be present in roofing materials and/or mastics that are not readily accessible for observation. According to Ms. DelMage, there are no known ACMs at any of the three Bundy Drive buildings. Ms. DelMage reported that prior to the adjacent television studio occupying the project site, the buildings were "shelled out," and any ACMs would have been removed at that time. The Previous Preliminary Site Assessment stated that the 12333 Olympic Boulevard building has the potential to contain ACMs. Historical records indicate that all four buildings on the project site were constructed prior to 1980 and, therefore, ACMs may have been used during building construction. The Asbestos Operations & Maintenance Program, 1901, 1925 and 1933 S. Bundy Drive, Los Angeles, California (the "Asbestos Program") was prepared by Allstate Services Environmental, Inc. on November 17, 2005 and is included in Appendix E to this Draft EIR. The Asbestos Program, which was developed to control any ACMs that may be present on the project site, contains each of the following elements: asbestos program manager and building owner responsibilities; building inspections and assessment; operations, maintenance, and work procedures; applicable

regulations and guidelines; notification and communication program; surveillance program; record keeping program; worker protection program; and waste disposal program.

Based on the protocol set forth in the <u>Asbestos Program</u>, the <u>Asbestos Sampling Report at 1933 South</u> <u>Bundy Drive, Los Angeles, California 90025</u>, (the "<u>Asbestos Report</u>"), was prepared by Allstate Services Environmental, Inc., on January 31, 2006 (see Appendix E to this Draft EIR). The <u>Asbestos Report</u> summarized the results of a visual inspection and sampling conducted on January 26, 2006 for PACMs at the on-site structure located at 1933 Bundy Drive. As described in the <u>Asbestos Report</u>, samples were collected from a total of 35 accessible areas throughout the 1933 Bundy Drive building. PACM samples included interior drywall, baseboard mastic, floor tiles, wall panels, carpet mastic, and window putty, as well as exterior wall caulking, stucco, and moisture barrier.<sup>11</sup> A total of 48 individual samples were analyzed for presence of asbestos pursuant to Asbestos Hazard Emergency Response Act (AHERA) guidelines. The analysis did not detect asbestos in any of the 48 samples analyzed. As a result, the <u>Asbestos Report</u> did not recommend follow-up action with regard to asbestos at the 1933 Bundy Drive building. The <u>Asbestos Report</u> did not include a visual inspection or sampling of PACMs at the 1901 or 1925 Bundy Drive buildings or at the 12333 Olympic Boulevard building.

In addition American Environmental Group (AEG) prepared a limited asbestos survey (the "Asbestos Survey") of the commercial building located at 12333 Olympic Boulevard in compliance with South Coast Air Quality Management District's Rule 1403 for sampling and renovation activities (see Appendix E to this Draft EIR). While the report for the Asbestos Survey was completed on September 7, 2008, the actual sampling activities to support the report were conduced on August 20, 2008. As part of the Asbestos Survey, the sampling of suspect-ACMs in the Olympic commercial buildings was conducted on August 20, 2008 following the provisions of 40 CFR Part 763.86. The analysis of suspect ACM samples for asbestos was performed per Appendix A, Subpart F, 40 CFR Part 763, Section 1 via Polarized Light Microscopy, by AmeriSci Los Angeles in Carson, California. AmeriSci Los Angeles is a NVLAP accredited PLM laboratory. The Asbestos Survey also considered the results of two previous asbestos surveys at the project site by Glenfos Incorporated (Glenfos). One survey was completed on January 30, 1996 and the other was completed on April 7, 1997. The Glenfos 1996 report was an asbestos survey of the building(s), however appears to be limited to the collection of 50 random samples. The Glenfos 1997 report was limited in scope to the sampling the roofing materials only.

# Lead-Based Paint

Lead-based paint (LBP), which can result in lead poisoning when consumed or inhaled, was widely used in the past to coat and decorate buildings. Lead poisoning can cause anemia and damage to the brain and nervous system, particularly in children. Like ACMs, LBP generally does not pose a health risk to

<sup>&</sup>lt;sup>11</sup> The <u>Asbestos Report</u> did not include collection of samples from non-accessible areas of the 1933 Bundy Drive building (e.g., the roof).

building occupants when left undisturbed; however, deterioration, damage, or disturbance will likely result in hazardous exposure. In 1978, the use of LBP was federally banned by the Consumer Product Safety Commission. Therefore, buildings built before 1978 are likely to contain LBP, as well as buildings built shortly thereafter, as the phase-out of LBP was gradual.

The <u>Phase I ESA</u> determined that lead is not utilized or stored at the project site. Based on the age of the four buildings, it is likely that LBP was used during construction. Given the extensive history and modifications made to the buildings since the date of original construction, it is likely that any LBP that may have been used in the buildings has been painted over and/or covered (encapsulated) by subsequent painting and/or building renovations. No significant peeling, flaking or chipping paint was observed on building interior or exterior surfaces during the project site reconnaissance.

In addition, AEG performed a limited LBP inspection of the interior and exterior of the building located at 12333 Olympic Boulevard on Parcel B as part of the <u>Lead Survey</u> (see Appendix E to this Draft EIR). The <u>Lead Survey</u> was conducted in accordance with procedures set forth by the United States Department of Housing and Urban Development (24 CFR Part 35.80 – 35.98 and 35.3120(b), as well as federal, State, and regional laws including:

- Toxic Substances Control Act Section 406;
- 40 CFR 754.103 United States Environmental Protection Agency;
- Title 17 Section 35000 Code of California Regulations;
- Cal/OSHA Title 8 Section 1532.1 California Occupational Safety and Health Administration; and
- Cal/OSHA Title 8 Section 5194 California Occupational Safety and Health Administration.

Samples were collected from the building, including the mezzanine level, located at 12333 Olympic Boulevard to determine if locations on and/or within the building exceed Los Angeles County Department of Health Services' ("LA County Health Services") threshold for "dangerous level of lead-bearing substances" of  $0.7 \text{ mg/cm}^2$ .

# Radon

Radon is a colorless, odorless gas that exists naturally in some geologic formations. Radon gas can enter a home from the soil through cracks in concrete floors and walls; however, radon levels are generally highest in basements and ground-floor rooms that come into contact with the earth. Building products, especially cinder blocks made from material high in uranium and other alpha-emitting radionuclides, may release radon gas. Information obtained from the USEPA indicates that the project site is located in Zone 2, where the predicted average indoor radon level is typically > =2 picocuries per liter (pCi/L), and <=4

pCi/L. Radon mitigation measures are recommended by the USEPA when concentrations of radon exceed 4 pCi/L. There are no basements located inside the any of the three former office buildings. In addition, there are no known radioactive sources or materials in use or in storage at the project site. A radon gas survey was not conducted during the site visit conducted as part of the <u>Phase I ESA</u>; however, radon is not anticipated to be a concern at the project site. As such, potential hazards associated with radon are not discussed in further detail under "Project Impacts" later in this Section.

# **Results of Government Records Search for Project Site**

The <u>Phase I ESA</u> included a records search for local and regional agencies with regards to relevant environmental information for 1901, 1925, and 1933 Bundy Drive addresses. The following agencies were contacted:

- Department of Toxic Substances Control (DTSC), Glendale and Cypress Offices;
- County of Los Angeles Department of Health Services, Public Health Investigation Office;
- South Coast Air Quality Management District (SCAQMD);
- City of Los Angeles Department of Building and Safety (LABS);
- LADWP; and
- City of Los Angeles Fire Department (LAFD).

The above-listed agencies did not identify any records for the project site with the exception of one SCAQMD Equipment List Reports (EQL) for the 1901 Bundy Drive facility that lacked site-specific information and two EQLs for the 1925 Bundy Drive facility with two inactive permits to operate two electric diesel generators. The LADWP also responded stating that the transformers (No. 028-08-111) have not been tested for PCBs. The <u>Phase I ESA</u> did not inquire with the above-listed agencies regarding the 12333 Olympic Boulevard address.

Nonetheless, in 1995, as part of the <u>Previous Preliminary Site Assessment Report</u>, Glenfos, Inc. researched the City of Los Angeles Fire Department (LAFD) files concerning the 12333 Olympic Boulevard address. According to LAFD files, the, Teledyne Controls maintains a large inventory of hazardous materials that are used and in storage at the west side of the 12333 Olympic Boulevard building, including paints, solvents, motor oils, thinners, acids, and bases. The LAFD files also indicated that a total of four USTs were removed at the northeast corner of the Teledyne Controls facility in early 1990. The tanks reportedly contained diesel fuel, gasoline, and mineral oil. Subsequent soil investigations conducted at the property in June 1990 showed that concentrations ranged from not detected (ND) to 510 milligrams per kilogram (mg/kg) for total petroleum hydrocarbons (TPH) and from ND to 3.6 mg/kg for benzene, toluene, ethylbenzene, and xylene (BTEX) compounds. A confirmatory

soil boring was conducted after the excavation of one of the gasoline tanks which indicated that all seven samples taken to 41 feet bgs were ND for both TPH and BTEX. Based on this information, the LAFD issued a "No Further Action" (NFA) letter in July 1990 stating that there are no contaminants at hazardous levels present on-site. Based on the results of the <u>Previous Preliminary Site Assessment</u> <u>Report</u>, Glenfos, Inc. conducted follow-up subsurface site investigations, which are discussed later in this Section under the "Summary of Previous Subsurface Investigations" subheading.

# **Database Review of Project Site and Surrounding Properties**

The <u>Phase I ESA</u> included a search of regulatory agency hazardous materials database listings for the 1901, 1925, and 1933 Bundy Drive addresses; the <u>Previous Preliminary Site Assessment Report</u> included a search of regulatory agency hazardous materials database listings for the 12333 Olympic Boulevard address. Both reports also provided a list of hazardous materials sites within the American Society for Testing Materials (ASTM)-designated search radius (i.e., generally one, one-half, or one-quarter mile radius) of the project site; however, only the site summary from the Phase I ESA is discussed below as it is the more current of the two.

# Project Site

The database search results showed that the portions of the project site that include the 1901, 1925, and 1933 Bundy Drive buildings are not included on any hazardous waste listings searched. The 12333 Olympic Boulevard building is listed on the Resource Conservation and Recovery Information System - Small Quantity Generator (RCRIS-SQG) list as a large quantity generator of hazardous waste including chlorinated solvents, and is listed on the Facility Index System (FINDS) database. The 12333 Olympic Boulevard building is also known to be a source of industrial wastewater discharge and is known to maintain regulatory permits with the SCAQMD for air emissions.

# Surrounding Properties

The database search results showed several sites within a one-mile radius of the project site that are also located at an equal or higher elevation than the project site. The project is within a one-mile radius of eight Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) listed sites; 23 CERCLIS No Further Remedial Action Planned (NFRAP) sites; one Resource Conservation and Recovery Information System Treatment, Storage, Disposal (RCRIS TSD) site; four RCRIS-LQG sites; 58 RCRIS-Small Quantity Generator (SQG) sites; two Emergency Response Notification System (ERNS) sites; one Site Mitigations and Brownfields Reuse Program Facility (Calsite) site; 33 Hazardous Waste and Substances Site List - Site Cleanup (Cortese) site; eight State landfill sites; eight Waste Management Database Unit (WMUDS/SWAT) sites; 33 Leaking Underground Storage Tank (LUST) sites; 48 California Facility Inventory (CA-FID) sites; 14 USTs (including the adjacent television studio to the south and the City of Los Angeles Animal Shelter to the east); and 39 historic USTs (HIST-UST). The project site is within one-half mile of three California Hazardous Material Incident Report System (CHMIRS) sites.

Of these various hazardous sites listed within the project vicinity, several sites were identified that may have the potential to be of environmental concern to future development of the project site based on their distance to the project site, the expected depth and direction of ground water and surface water flow, the expected storm water flow direction, and the presence/absence of documented contaminant releases that have not been remedied. Those above-listed hazardous sites in the project vicinity that do not have the potential to be of environmental concern to future development of the project site (i.e., due to their distance to the project site, expected depth and direction of ground water and surface water flow, expected storm water flow direction, and/or lack of documented non-remediated contaminant releases) are not discussed in detail below. Those sites with potential to be an environmental concern to future development of the project site include the following:

- LUST site: Western District Collection Yard, located 2,418 feet east, northeast of the project site at 2027 Stoner Avenue. This property is reported to have a leaking UST. The quantity of the leak was not reported, however, groundwater was affected. The listed status of the facility is "pollution characterization."
- LUST site: ARCO Power Gas Station, located 2,884 feet east of the project site at 11748 Olympic Boulevard. This property is reported to have a leaking UST. The quantity of the leak was not reported, however groundwater was affected. The listed status of the facility is "remediation plan."
- LUST site: SHELL Service Station, located 4,361 feet north, northeast of the project site at 11574 Santa Monica Boulevard. This property is reported to have a leaking UST. The quantity of the leak was not reported. The case type is recorded as soil only. The listed status of the case is 'leak being confirmed' for hydrocarbons.
- LUST site: Thrifty, located 4,615 feet north, northeast of the project site at 11526 Santa Monica Boulevard. The property is reported to have a leaking UST. The quantity of the leak was not reported. The case type is recorded as soil only. The listed status of the case is "leak being confirmed" for hydrocarbons.
- CERCLIS site: AVES Trust, located 1,708 feet to the east, northeast at 2010 Westgate Avenue.
- California Spills, Leaks, Investigation and Clean-up (CA-SLIC) list: Stoner Avenue Site, located 2,645 feet east of the project site at 2131 Stoner Avenue. This site is listed due to a "potential annual work plan (AWP)" underway at the property.

# **Conclusions of Phase I ESA**

The <u>Phase I ESA</u> observed low levels of volatile organic compounds (VOCs), primarily PCE and TCE, in vapor samples collected at and near the three existing building at 1901, 1925, and 1933 Bundy Drive, as

well as within groundwater beneath the project site. An unknown hydrocarbon was observed at relatively high concentrations in vapor samples collected at or near the 12333 Olympic Boulevard building, which was reported to be an isomer or a derivative of perfluorotri-n-butylamine, a relatively non-toxic compound. However, the Los Angeles Regional Water Quality Control Board (LARWQCB) has suggested that this compound could degrade into chemicals that could adversely affect area groundwater. Based on the historical use of the project site (agricultural and industrial), other chemicals could have been deposited in the subsurface such as pesticides, polyaromatic hydrocarbons, metals, and petroleum hydrocarbons. Surrounding properties that have the potential to impact the project site have also been identified in several databases, including LUSTs, and potential hazardous waste sites. Furthermore, while not identified as "recognized environmental conditions," the project site may contain PACMs in the two non-surveyed former office buildings, and may contain PCBs in the three pad-mounted transformers in the south parking area. Based on these factors, the <u>Phase I ESA</u> determined that the project site would warrant subsequent subsurface and groundwater investigation.

# Phase II Reports for Project Site

# Summary of Previous Subsurface Investigations

#### Previous Subsurface Investigations (1995 and 1996)

As discussed previously in this Section under "Results of Government Records Search for the Project Site," the <u>Previous Preliminary Site Assessment Report</u> recommended additional subsurface investigation of the project site. As a result, Glenfos, Inc. prepared the <u>Phase II Investigation Report</u>, 12333 West Olympic Boulevard and 1901, 1925 & 1933 Bundy Drive, AGI Properties, Inc., Los Angeles, CA 90064 (the "Previous Phase II Investigation Report") on September 6, 1995 and the <u>Phase II Soil Assessment</u>, 12333 West Olympic Boulevard and 1901, 1925 & 1933 Bundy Drive, AGI Properties, Inc., Los Angeles, CA 90064 (the "Previous Phase II Soil Assessment") on February 15, 1996. Together, the <u>Previous Phase II Soil Assessment</u>") on February 15, 1996. Together, the <u>Previous Phase II Investigation Report</u> and <u>Previous Phase II Soil Assessment</u> addressed the installation of 60 temporary soil vapor testing points; two soil borings; four single-interval vapor monitoring points; two multi-depth vapor monitoring points; two vapor extraction wells; and three perched groundwater monitoring wells. The primary findings of these two previous Phase II investigations are as follows:

- Soil borings and vapor probes were installed at 5, 15, and 30 feet at two noted areas of concern, including the loading dock west of the 12333 Olympic Boulevard building, and the former loading dock area at the northeast corner of the 12333 Olympic Boulevard building;
- Results of the soil vapor probes showed concentrations of VOCs including PCE, TCE, and chloroform, as well as an unknown halogenated mixture (jet fuel to diesel range), Freon 11, and Freon 13 were identified in soil vapor samples at these two locations at depths ranging from 5 to 30 feet bgs, with PCE and TCE concentrations increasing with depth at the loading dock area west of the 12333 Olympic Boulevard building. Freon 11, Freon 13, Chloroform, 1,1,1 trichloroethane (TCA), and TCE vapors were also discovered in the subsurface soil.

Some of the vapor-phase VOCs may be emanating from an off-site source to the northwest of the project site;

- Results of the soil borings showed soil samples did not contain significant levels of contaminants;
- Shallow perched groundwater (present at a depth of approximately 35 feet bgs and flowing in a southerly direction) has been impacted by VOCs, including Chloroform, TCA, TCE, PCE, and dichloroethene (DCE). Some of the VOCs in the groundwater emanate from off-site sources;
- Additional areas of elevated VOCs have been observed at the portions of the project site along Bundy Drive including low-level sources of PCE detected along the southwest side of the three Bundy Drive buildings; and
- During its operation, the soil vapor extraction (SVE) system removed approximately 25 pounds of VOC. Initial influent concentrations were 35.2 micrograms per liter (μg/L) for PCE and 3.33 μg/L for TCE. After operation of the extraction system and closure for several weeks, the influent was again tested, and much reduced concentrations of 4.1 μg/L for PCE and less than 0.25 μg/L for TCE were found.

# Additional Subsurface Investigation (1999 to 2000)

The site owners subsequently requested case closure from the LARWQCB. However, the LARWQCB requested that a second soil and groundwater investigation be conducted. In 1999, additional VOC investigation and the installation of two monitoring wells was completed. As outlined in the <u>Supplemental Investigation of VOCs</u>, 12333 West Olympic Boulevard, AGI Properties, Inc., prepared by Glenfos, Inc., in March 2000, soil vapor sampling determined that PCE and TCE were present in relatively low concentrations and that the other compounds (i.e., chloroform, 1,1,1-TCA and 1,1-DCE) were no longer present. Perched groundwater concentrations near the loading dock in the vicinity of the SVE were also substantially lower than they had been prior to the soil vapor remediation.

# Additional Subsurface Investigation (2001 through 2004)

The LARWQCB indicated that the improvements in soil vapor and perched groundwater conditions may not have been permanent but may instead have been the result of samples having been obtained too close to the extraction system. An additional monitoring well was drilled in the southern portion of the project site in June 2001 to further evaluate the extent of contamination and verify the effectiveness of the previous remediation activities. Quarterly soil samples taken from this monitoring well between June 2001 and March 2004 found no indications of soil contamination. The <u>Twelfth Quarterly Sampling (March 2004), 12333 West Olympic Boulevard, Westside Medical Park</u>, prepared by Glenfos, Inc., in March 2004 showed that perched groundwater samples in all existing and new wells had concentrations

similar to or lower than the concentrations found in 1999, showing that conditions had substantially improved as a result of the remediation in 1996.

#### New Phase II Investigations

As a follow-up to the <u>Phase I ESA</u>, the <u>Phase II Site Investigation Report</u>, <u>Westside Medical Park</u>, <u>West</u> <u>Los Angeles</u>, <u>California</u> (the "<u>Phase II Report</u>"), was prepared by Environmental Resources Management on September 9, 2004 to assess the potential presence of metals, pesticides, PCBs, and TPHs in the shallow soil; evaluate the presence of VOCs in soil vapor in the vadose zone; and further characterize perched groundwater conditions for the project site. The <u>Phase II Addendum</u>, <u>Westside Medical Park</u>, <u>12333 Olympic Boulevard</u>, <u>West Los Angeles</u>, <u>California</u> (the "<u>Phase II Addendum</u>") was prepared by Environmental Resources Management on September 10, 2004 as an augmentation to the <u>Phase II Report</u> and provides additional soil vapor analysis for the central portion of the project site.

#### Soil Sampling

The <u>Phase II Report</u> involved 14 shallow soil borings which were installed at the intersections of grid lines within a 100-foot gridline system throughout the project site. Two shallow soil samples were collected at each boring, one at approximately 6 inches bgs ("near-surface") and a second at approximately 5 feet bgs. In addition, soil samples were collected and analyzed at 5, 15, and 30 feet bgs at each of the well installation boreholes. (Well locations are discussed under the "Groundwater Sampling" subheading, below.) The <u>Phase II Report</u> also installed five combination soil vapor/soil matrix sampling points in the areas on the Bundy Drive portion of the project site with the highest VOC concentrations observed during the soil vapor survey (discussed in more detail below). Combination soil vapor/soil matrix samples were collected at a depth of 6 inches and at 5-foot intervals to a depth of 30 feet bgs (or the maximum depth achievable). The <u>Phase II Addendum</u> installed one soil vapor/soil matrix sampling point at the location with the highest and/or most diverse range of tentatively identified compounds (TICs) found in the soil vapor in the central portion of the project site. A near-surface soil sample was collected at a depth of approximately 1-foot bgs and additional soil samples were collected at 5-foot intervals up to 30 feet bgs.

As part of the <u>Phase II Report</u>, 38 soil samples were analyzed for VOCs and were compared to the USEPA's Preliminary Remediation Goals (PRGs) for residential land use and the Office of Environmental Health Hazard Assessment's (OEHHA) soil screening levels (SSLs) for soil gas intrusion. TCE and PCE were detected in 10 of the 31 samples. No results exceeded the PRGs for residential land use; however, all of the detected concentrations of PCE and TCE exceeded the OEHHA's SSLs for soil gas intrusion. No other VOCs were detected. Sixteen samples were analyzed for TPH in the C6 to C36 carbon-chain range and were compared to the LARWQCB's SSLs. TPH was detected in 13 of these samples; however, no results exceeded the LARWQCB's SSLs. Eighteen soil samples were analyzed for California Assessment Method (CAM) 17 metals and were compared to the USEPA's PRGs. Thirteen metals, including antimony, arsenic, barium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, silver, vanadium, and zinc, were detected in one or more of the 18 soil samples; however, all detected

concentrations were below the PRGs for residential land use. Ten soil samples were analyzed for organochlorine pesticides (OCPs) and were compared to the USEPA's PRGs. Concentrations of OCPs were detected in four of the 10 samples analyzed. Results of the pesticides analysis were compared to the PRGs for residential land use; however, all detected concentrations were below the PRGs for residential land use. Ten soil samples were analyzed for PCBs and were compared to the USEPA's PRGs. PCB concentrations were detected in one of the ten samples analyzed; however, all detected concentrations were below the PRGs for residential land use.

With respect to the soil samples analyzed as part of the <u>Phase II Addendum</u>, 9 VOCs, and one Semivolatile organic compound (SVOC) were detected at low concentrations; however, only chloroform has a USEPA PRG for residential land use and none of the detected chloroform concentrations exceeded the PRG. In addition, no TICs matched any of the perfluoronated compound standards prepared. One soil sample was analyzed for TPH in the C6 to C36 carbon-chain range but did not exceed the LARWQCB's SSLs. One soil sample was analyzed for metals. A total of 11 metals were detected, including arsenic, barium, cadmium, chromium, cobalt, copper, lead, molybdenum, vanadium, and zinc. However, all detected concentrations were below the PRGs. One soil sample was analyzed for OCPs, low concentrations of which were detected; however, all detected concentrations were below the PRGs. One soil sample was analyzed for SVOCs and PCBs, neither of which were at or above the reporting limits.

# Soil Vapor Sampling

The <u>Phase II Report</u> conducted a soil vapor survey, involving the installation of 35 soil vapor sampling probes on the portion of the project site along Bundy Drive, in and around previously installed vapor points that exhibited elevated concentrations of VOCs. Soil vapor samples were collected at a depth 10 feet bgs, and then at depths of 5 through 30 feet bgs. Sixty-eight soil vapor samples (including three duplicates) were collected and analyzed for VOCs and were compared to the OEHHA's SSLs. One or more VOCs were detected in 43 of the 68 soil vapor samples, including PCE, TCE, chloroform, ethylbenzene, 1,1-dichloroethene (1,1-DCE), 1,1,1-trichloroethane, (1,1,1-TCA), toluene, and xylenes. PCE and TCE were the only compounds detected at concentrations exceeding the OEHHA's SSLs. The highest concentrations were observed in near surface soil vapor beneath the 1933 Bundy Drive building, with a secondary concentration found near the 1901 Bundy Drive building.

The <u>Phase II Addendum</u> involved the installation of five additional soil vapor sampling probes up to a depth of 10 feet bgs in the center portion of the project site. Chloroform, 1,1,1-TCA, and TCE were the only VOCs detected in soil vapor. Chloroform was detected in three of the five samples; 1,1,1-TCA was detected in one of the five samples; TCE was detected in two of the five samples. No results exceeded OEHHA's SSLs for residential land-use. A group of 20 perfluoroalkanes were present within four of the five vapor samples analyzed, two of which matched the gas chromatography mass spectrometer (GC/MS) test procedure standard for percluorotributylamine (PFTBA). Perfluoroalkanes and PFTBA are compounds with suspected low toxicity levels.

#### Groundwater Sampling

Three new groundwater monitoring wells were installed at the project site, in addition to the existing Monitoring Well 1 (MW-1), MW-2, and MW-3. MW-4 was installed upgradient of the 12333 Olympic Boulevard building in an area that was found to contain high concentrations of chloroform in previous soil vapor data collected. MW-5 was located downgradient of the 12333 Olympic Boulevard building. MW-6 was located downgradient of an area where elevated concentrations of PCE and TCE were encountered in soil and soil vapor. Sampling of the water in each well commenced following approximately one week after installation. Perched groundwater samples were analyzed for VOCs (including fuel oxygenates, 1-4 dioxane, and 1,2,3 trichloropropane) were compared to the California Maximum Contaminant Levels (MCLs). The results of the sampling indicated that only one well (MW-5) contained PCE at a concentration exceeding its MCL; four wells (MW-1) contained 1,1-DCE at a concentration exceeding its MCL; one well (MW-1) contained chloroform at a concentration exceeding its MCL. The <u>Phase II Addendum</u> concluded that none of the perfluoronated compound standards prepared were found to match TICs observed in groundwater samples.

# Conclusions of New Phase II Reports

The <u>Phase II Report</u> concluded that elevated PCE and TCE concentrations in soil and soil vapor beneath the portion of the project site along Bundy Drive can be addressed by traditional SVE coupled with vaporphase granular activated carbon for abatement of extracted vapors prior to discharge to the atmosphere. A quarterly groundwater sampling program was also recommended. The <u>Phase II</u> <u>Addendum</u> concluded that perfluoronated compounds, including PFOA (and related telomers) with suspected high toxicity values, were not observed in soil samples, soil gas samples, or groundwater samples collected and analyzed at the central portion of the project site. Perfluoroalkanes and PFTBA (compounds with suspected low toxicity values) are present in the soil gas near the center of the project site. No other chemicals of concern were observed in soil samples collected near the center of the project site.

# **Remedial Action Plan and System Progress**

Based on the results of the <u>Phase II Report</u> and <u>Phase II Addendum</u>, the <u>Remedial Action Plan</u>, <u>Westside</u> <u>Medical Park – Bundy Parcel</u>, <u>Los Angeles County</u>, <u>California</u> (the "<u>Remedial Action Plan</u>") was prepared by Environmental Resources Management, on April 22, 2005. The <u>Remedial Action Plan</u>, which was conditionally approved by the LARWQCB in a letter dated May 24, 2005, is intended to reduce contaminate mass at the project site and within groundwater and eliminate potential exposure of future development at the project site to VOCs and perfluoroalkanes, particularly PCE and TCE. The <u>System Progress Report</u>, <u>Westside Medical Park - Bundy Parcel</u>, <u>Los Angeles County</u>, <u>California</u> (the "<u>System Progress Report</u>"), was prepared by Environmental Resources Management on January 10, 2007. The <u>System Progress Report</u> describes remediation activities conducted on the project site during the 3<sup>rd</sup> quarter (July 1 through September 30) of 2006 in compliance with the <u>Remedial Action Plan</u>.

# **Remedial** Action Plan

The overall objective of the Remedial Action Plan is to reduce contaminant mass of VOCs, particularly PCE and TCE, as well as perfluoroalkanes to limit potential risks associated with soil vapor intrusion into future development on the project site, and potential future threats to groundwater. The Remedial Action Plan identified two main areas where elevated concentrations of PCE and TCE exist on the project site. Area 1 is centered on the northwestern half of the 1933 Bundy Drive building and contains the highest PCE and TCE concentrations in soil vapor. Area 2 is centered immediately southwest of the 1901 Bundy Drive building. A third area (Area 3) is adjacent to the northeast corner of the 12333 Olympic Boulevard building and may contain elevated concentrations of perfluoroalkanes in the vapor phase. The Remedial Action Plan proposed 12 near-surface (i.e., 6-inch) soil borings to test for OCPs and PCBs; groundwater monitoring well installation and quarterly sampling of two up-gradient monitoring wells to identify potential contaminant sources off-site; and use of SVE and/or electric resistance heating (ERH) technologies to reduce VOC and perfluoroalkane concentrations in the extracted vapors to asymptotic levels. The SVE system, as proposed, included nine extraction wells in Area 1, five in Area 2, and five in Area 3, spaced approximately 35 feet apart. Specific details regarding operation of the SVE system are provided in the <u>Remedial Action Plan</u>, included in Appendix E to this Draft EIR. The <u>Remedial Action</u> <u>Plan</u> proposed that the SVE system would operate for approximately 12 months with data sent to the LARWQCB on a quarterly basis.

# System Progress

The SVE system recommended in the <u>Remedial Action Plan</u>, discussed above, was installed and began operation on May 12, 2006. In accordance with the <u>Remedial Action Plan</u>, nine extraction wells were installed inside of the existing 1933 Bundy Drive building (Area 1), five extraction wells outside of the existing 1901 Bundy Drive building (Area 2), and five extraction wells immediately north of the existing Teledyne Controls building (Area 3). The extraction wells were spaced approximately 35 feet apart, with overlapping radii of influence (ROI) to ensure each affected area was treated by vacuum.

Since operation began, the SVE system has been inspected for maintenance issues on a weekly basis, and the individual extraction wells have been inspected and vapor samples collected on a monthly basis. The <u>System Progress Report</u> describes SVE remediation activities conducted on the project site from July 1 through September 30, 2006. Vapor samples collected over this monitoring period included the following VOCs: chloroform, DCE, TCE, TCA, PCE, and perfluoro compounds. Changes in VOC levels in the vapor samples over this period showed that within Area 1 concentrations decreased dramatically, and within Area 2 concentrations remained relatively low and stable. Within Area 3, concentrations of perfluoro compounds have remained relatively high and stable, suggesting that the potential source area in the vicinity of the 12333 Olympic Boulevard building may require further evaluation. Groundwater sampling was conducted on September 26, 27, and 29, 2006. VOCs identified in groundwater samples included DCA, DCE, chloroform, PCE, and TCE. Most of these compounds were observed at levels in

excess of their respective MCLs, showing minimal change in concentrations in the majority of monitoring wells as compared to the previous quarter's data.

#### No Further Action Required Determination

On May 27, 2008, the Applicant received a letter from the California Regional Water Quality Control Board (RWQCB) stating that based upon a review of the most recent groundwater, soil matrix and soil vapor analytical data, the results of past assessments and remedial work completed at the project site, in addition to reviewing groundwater monitoring reports dating back to 2001, no further requirements regarding soil remediation are warranted at the Parcel A. As such, no further remediation activities for soil are required. This letter is included with Appendix E to this Draft EIR.

# **ENVIRONMENTAL IMPACTS**

#### Thresholds of Significance

In accordance with Appendix G to the State CEQA Guidelines, a project would have a significant effect on the environment if it would:

- (a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- (b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- (c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- (d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- (e) For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- (f) For a project located within the vicinity of a private airport strip, result in a safety hazard for people residing or working in the project area;
- (g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

(h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residence are intermixed with wildlands.

As discussed in Section IV.A (Impacts Less Than Significant) of this Draft EIR, the proposed project would have no impact with respect to Thresholds (e), (f), (g) and (h), listed above. As such, no further analysis of these topics is required.

Furthermore, as set forth in the City of Los Angeles' <u>L.A. CEQA Thresholds Guide</u>, the determination of significance shall be made on a case-by-case basis, considering the following factors:

- (a) The regulatory framework;
- (b) The probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance or exposure to a health hazard;
- (c) The degree to which the project may require a new, or interfere with an existing emergency response evacuation plan, and the severity of the consequences; and
- (d) The degree to which project design will reduce the frequency or severity of a potential accidental release, explosion of a hazardous substance, or exposure or severity of consequences of exposure to a health hazard.

# **Project Impacts**

The proposed project involves the demolition of all existing structures and surface parking on the project site and the development of approximately 385 dwelling units, 119,838 square feet of retail/commercial space (including 9,500 square feet of restaurant space), and 384,735 square feet of medical office and pharmacy space. A total of approximately 3,276 parking spaces would be provided in a combination of subterranean and above-grade parking structures throughout the project site.

# Routine Transport, Use, or Disposal of Hazardous Materials

# Construction

Construction of the proposed project would involve the use of those hazardous materials that are typically necessary for construction of commercial and residential development (i.e., paints, building materials, cleaners, fuel for construction equipment, etc.). Therefore, construction of the proposed project would involve routine transport, use, and disposal of these types of hazardous materials throughout the duration of construction activities. Furthermore, the transport, use, and disposal of construction-related hazardous materials would occur in conformance with all applicable local, State, and federal regulations governing such activities. For example, the proposed project would be required to implement standard best management practices (BMPs) set forth by the City and the LARWQCB which would ensure that wastes

generated during the construction process are disposed of properly. Therefore, the proposed project would not create a significant impact related to routine transport, use, or disposal of hazardous materials during construction.

#### Operation

Operation of the proposed project would involve the transport, use, and disposal of hazardous materials typically associated with residential and community-serving commercial uses. Hazardous materials commonly used in the operations of residential, retail/commercial, and restaurant uses include minimal amounts of solvents and household products used for routine cleaning, maintenance, and landscaping. Therefore, the residential, retail, and restaurant components of the proposed project would not involve the routine transport, use, or disposal of substantial amounts of hazardous materials.

Hazardous and flammable materials that are commonly used in medical projects include, but are not limited to, small quantities of sodium hydroxide, chlorine bleach, gases, acids and other substances typically used in medical clinics, fuels used for mechanical equipment, and cleaning solutions, adhesives, stains, and paint thinner used in maintenance activities. Hazardous wastes associated with medical-related uses typically include biohazardous "red bag" wastes (e.g., blood saturated items, bags and intravenous (IV) tubing containing blood products, suction canisters, hemovacs, chest drainage units, hemodialysis products, etc.) and biomedical wastes (e.g., sharps, pathology specimens and samples, medication). Additionally, activities involving nuclear medicine, which is used in the diagnosis, management, treatment, and prevention of serious disease, may involve the use of very small amounts of radioactive materials or radiopharmaceuticals for the diagnosis and treatment of diseases.

All hazardous waste, including biohazardous and biomedical wastes, generated or used on the project site would be properly regulated, transported, and disposed off-site by a licensed subcontractor, in compliance with all applicable City, State, and federal regulations and requirements. Pursuant to Section 57.08 of the City of Los Angeles Municipal Code (LAMC), all businesses that handle hazardous materials in excess of 500 pounds or 55 gallons would be required to file a Hazardous Materials Release Response Plan (HMRRP) and Inventory Program and to prepare and submit a Business Plan to the LAFD, which provides the following elements:

- (a) Annual inventory of hazardous materials used, including the following:
  - A listing of the chemical name, common names, and general chemical and mineral composition by probable maximum and minimum concentrations of every hazardous substance or chemical product handled.
  - (ii) The maximum amount of each hazardous material handled at any one time over the course of the year.

- (iii) Sufficient information on how and where the hazardous materials are handled to allow fire, safety, health, and other appropriate personnel to prepare adequate emergency responses in the case of potential releases of the hazardous materials.
- (iv) The SIC Code number of the business if applicable.
- (v) The name and phone number of a contact person to assist emergency personnel in the event of an emergency during nonbusiness hours.
- (b) Emergency response procedures for release or threatened release of hazardous materials, including the following:
  - (i) immediate notification of local emergency response personnel, the LAFD, the State Office of Environmental Safety (OES), and other appropriate persons on-site;
  - (ii) identification of local emergency medical assistance in case of accidents;
  - (iii) mitigation, prevention, or abatement of hazards to persons, property, or the environment;
  - (iv) immediate notification and evacuation of the facility; and
  - (v) identification of mechanical or other systems that require immediate inspection or isolation because of their vulnerability to earthquakes.
- (c) A training program which shall, at minimum, include:
  - (i) methods for safe handling of hazardous materials;
  - (ii) procedures for coordination with local emergency response organizations;
  - (iii) controlled use of emergency response equipment and supplies; and
  - (iv) provisions to ensure that appropriate personnel receive initial and refresher training.

In addition to local regulations specifically identified above, the proposed project would be required to comply with federal OSHA and Cal OSHA requirements. Prior to mitigation, the proposed project would result in a potentially significant impact related primarily to the disposal of biohazardous waste associated with the proposed medical offices and pharmacy. Nonetheless, as set forth in the mitigation measure recommended in this Section, the proposed project would be required to comply with all applicable City, State, and federal regulations and requirements governing the proper use and disposal of biohazardous waste. Implementation of this mitigation measure would ensure that operation of the proposed project would result in a less-than-significant impact with respect to the routine transport, use, and disposal of hazardous materials.

# Accidental Release of Hazardous Materials

#### Construction

The proposed project would have the potential to result in the accidental release of hazardous materials during the construction phase. The following is a summary of these potential construction-related risks, based on the observations and conclusions of the previous site investigations, the <u>Phase I ESA</u>, <u>Phase II Report</u>, <u>Phase II Addendum</u>, and <u>Phase II Soil Assessment</u>, as discussed under "Environmental Setting," above.

# Polychlorinated Biphenyls (PCBs)

As discussed previously, as part of the <u>Phase I ESA</u>, three pad-mounted LADWP transformers and one pole-mounted transformer were observed in the southwest parking area behind the 1901 Bundy Drive building and fluorescent light ballasts were observed throughout the building, none of which have been inspected for the presence of PCBs. Furthermore, the <u>Phase II Report</u> found low levels of PCB concentrations in soil samples. As such, the existing transformers and fluorescent light ballasts on the project site may contain PCBs. Prior to mitigation, the proposed project would result in a potentially significant impact related to accidental release of PCBs into the environment during construction. Nonetheless, as set forth in the mitigations and requirements governing the proper disposal of PCBs prior to any demolition activities. Compliance with this mitigation measure would ensure that the potential impact related to accidental release of PCBs would be reduced to a less-than-significant level.

# Asbestos-Containing Material (ACM)

At least three of the existing four structures on the project site have been documented as containing PACMs (i.e., materials with the potential to contain ACMs); although, ACMs may have been removed when these buildings were "shelled out," prior to the previous tenant. Subsequent testing of the interior and exterior of the 1933 Bundy Drive building, as documented in the Asbestos Report, did not detect asbestos in any of the 48 samples collected. The Previous Preliminary Site Assessment stated that the fourth structure, the 12333 Olympic Boulevard building, has the potential to contain ACMs. No comprehensive asbestos surveys have been conducted to verify whether ACMs are present in the existing on-site structures at 1901 Bundy Drive or 1925 Bundy Drive based on the age of each of these buildings, ACMs may have been used during building construction. Therefore, the Asbestos Program assumes that all existing building and facility materials not previously surveyed on the project site (except wood, glass, and metal) contain asbestos. As such, prior to mitigation, construction workers may have the potential to be exposed to airborne ACM during the removal of interior walls, floors, and ceilings, resulting in a potentially significant impact. Nonetheless, as set forth in the mitigation measure presented later in this Section, all existing on-site structures not previously surveyed would be required to undergo an asbestos survey and any asbestos discovered would be abated prior to demolition. The mitigation measure also requires full compliance with the Asbestos Program for the project site. Compliance with this mitigation

measure would ensure that the potential impact related to accidental release of asbestos associated with the structures at 1901 Bundy Drive and 1925 Bundy Drive would be reduced to a less-than-significant level.

Based on the results of the ACM samples taken from the 12333 Olympic Boulevard building, the <u>Asbestos Survey</u> concluded that the identified ACMs in the building are currently in good to damaged condition with a low to moderate potential for future damage. In addition, these materials subsequently represent a low to moderate health risk to tenants or workers. Nonetheless, a mitigation measure is recommended to ensure that impacts associated with this issue are reduced to a less-than-significant level.

#### Lead-Based Paint (LBP)

According to the <u>Lead Survey</u>, the building currently located at 12333 Olympic Boulevard contains 23 locations that equal or exceed the LA County Health Services' threshold of 0.7 mg/cm<sup>2</sup> for dangerous lead levels. Moreover, painted surfaces on and within the building that are below the threshold could result in the release of lead dust or lead contaminated soil hazards if these surfaces are turned into dust by abrasion scraping or sanding.<sup>12</sup> As such, prior to mitigation, construction workers may have the potential to be exposed to LBP during the demolition of building walls and interior structures. Therefore, impacts associated with the accidental release of LBP during construction would be potentially significant impact prior to mitigation. As such, mitigation measures presented later in this Section, are recommended to reduce potential impacts to a level that is less than significant.

#### Other Hazardous Materials

No other hazardous materials beyond those discussed above would have the potential to expose the public to accidental risks during the construction phase of the proposed project. The <u>Phase I ESA</u> concluded the project site does not show any evidence of known aboveground storage tanks (ASTs); generation, storage, or handling of hazardous waste; strained or stressed vegetation; underground septic system; wetlands onsite or in the vicinity; or drinking water supply wells. In addition, none of the following were observed in association with the three former office buildings: current or former use or storage of chemicals inside or outside of buildings; known USTs; basements; or use of mercury. Therefore, the proposed project would not have a potentially significant impact with respect to hazardous materials other than PCBs, ACMs, and LBP during the construction phase.

<sup>&</sup>lt;sup>12</sup> American Environmental Group, Inc., Limited Lead-Based Pain Inspection Commercial Building(s) 12333 Olympic Boulevard West Los Angeles, California 90064, September 7, 2008.

#### Operation

As discussed previously, operation of the proposed project involves the development of residential, retail/commercial, restaurant, medical office, and pharmacy uses. The proposed project would not expose residents, employees, or visitors to risks from exposure to PCBs, ACMs, or LBP, which would be abated prior to the construction of the proposed project. As discussed previously, the proposed project would involve the transport, use, and disposal of hazardous materials for routine cleaning, maintenance, landscaping, and operation of the medical office facilities. However, implementation of the mitigation measure identified would ensure that the proposed project would not create substantial risks due to accidental releases of any such hazardous materials and impacts would be less than significant. Operational impacts related to soil contamination are discussed in detail below.

#### Soil Contamination (VOCs and Perfluoroalkanes)

As discussed previously under the "Environmental Setting," elevated concentrations of several VOCs, including PCE and TCE, as well as perfluoro compounds, were discovered beneath the project site in Parcel A. As such, a soil vapor extraction (SVE) system was operated within the Parcel A portion of the project site, as recommended in the <u>Remedial Action Plan</u>. The operation and function of the SVE system is described in detail in Appendix E to this Draft EIR, pending a "no further action" determination by the LARWQCB. The overall objectives of the <u>Remedial Action Plan</u> are to eliminate potential exposures to VOCs and perfluoroalkanes, and to reduce contaminant mass, such as to limit potential risks associated with soil vapor intrusion into future development on the project site and potential future threats to groundwater.

The <u>Remedial Action Plan</u> proposed operation of the SVE system for approximately 12 months from the date of its installation, on May 12, 2006. However, remedial objectives may be met in one or more areas of the project site before the other areas and thus could be terminated in advance. Moreover, based on the No Further Action letter received from the RWQCB on May 27, 2008, no further remediation activities are required on Parcel A as a result of remediation activities that have occurred at the project site.<sup>13</sup> In order to reduce risks to future project residents, employees, and other visitors from exposure to VOCs and perfluoroalkanes at the project site, a mitigation measure is recommended in this Section which would comply with all of the conditions set forth in the May 27, 2008 letter would implemented, and impacts associated with this issue would be less than significant.

<sup>&</sup>lt;sup>13</sup> Written Correspondence from Tracey J. Egoscue, Executive Officer Regional Water Quality Control Board, May 27, 2008.

# **Proximity to Schools**

As discussed previously under "Environmental Setting," the project site is located within 0.25 mile of one existing school, New Roads High School, located 3131 W. Olympic Boulevard, west of the project site. (It should be noted that although this school is already in full operation, it is included as Related Project No. 49 in Table III-1 in Section III in association with an expansion project planned over the next few years.) In addition, the following schools are located just over 0.25 mile from the project site: Wildwood School Secondary Campus, located 11811 W. Olympic Boulevard, approximately two blocks east of the project site; and Westview School, located at 2000 Stoner Avenue, approximately four blocks east of the project site. No other schools are known to be proposed in the project vicinity.

# Construction

With respect to exposure of nearby students to hazardous materials during the construction process, as discussed under the "Accidental Release of Hazardous Materials" heading above, any potential PCBs, ACMs, or LBP present on the project site would be abated in accordance with all applicable City and State regulations prior to demolition activities associated with the construction of the proposed project. As part of the proposed project, the Applicant is seeking approval of a proposed haul route for the hauling of export soil and other debris from the project site to regional landfills. The haul routes proposed would either have construction-related traffic turn south onto Centinela Avenue from the project driveway on Olympic Boulevard (i.e., the future Park Lane), or south from one of the project driveways along Bundy Drive, to access the I-10 Freeway. However, neither haul route would involve construction-related traffic passing by any of the identified schools in the project vicinity as these schools are either located west of Centinela Avenue or east of Bundy Drive. Furthermore, as part of the haul route approval the City may require the Applicant to alter the proposed path of travel as necessary to avoid passing by existing schools or other surrounding sensitive uses. Therefore, the proposed project would not introduce substantial new hazards in the vicinity of an existing or proposed school during the construction process and impacts would be less than significant.

# Operation

With respect to exposure of nearby students to hazardous materials during operation, as discussed under the "Routine Transport, Use, or Disposal of Hazardous Materials" heading above, the mixed-use portion of the proposed project would use hazardous materials commonly associated with the operation of residential, retail/commercial, and restaurant uses. These may include minimal amounts of cleaning solvents, landscaping chemicals, and other household products used for routine cleaning, maintenance, and landscaping.

The medical office and pharmacy portion of the proposed project may involve the use of additional chemicals to ensure sanitary conditions (e.g., small quantities of sodium hydroxide, chlorine bleach, gases, acids, fuels, etc.) as well as the disposal of biohazardous and biomedical wastes, including, potentially, small amounts of radioactive materials. Nonetheless, all hazardous waste, including

biohazardous and biomedical wastes, generated or used on the project site would be required to comply with all applicable City, State, and federal regulations and requirements. Therefore, with the implementation of the recommended mitigation measure, which would ensure compliance with applicable hazardous materials regulations, the proposed project would not introduce substantial new hazards in the vicinity of an existing or proposed school during operation and impacts would be less than significant.

# Listed Hazardous Material Sites

As discussed above under "Environmental Setting," the Phase I ESA and the Previous Preliminary Site Assessment Report included a search of regulatory agency hazardous materials database listings for the 1901, 1925, and 1933 Bundy Drive addresses, and the 12333 Olympic Boulevard address, respectively. The database search results showed that the portions of the project site that include the 1901, 1925, and 1933 Bundy Drive buildings are not included on any hazardous waste listings searched. The 12333 Olympic Boulevard building is listed on the RCRIS-SQG list as a large quantity generator of hazardous waste including chlorinated solvents and is listed on the FINDS database. The 12333 Olympic Boulevard building is also known to be a source of industrial wastewater discharge and is known to maintain regulatory permits with the SCAQMD for air emissions. The database search results also showed several listed hazardous waste sites within a 0.5 to 1.0-mile radius of the project site. Of these various hazardous sites listed within the project vicinity, three LUST sites, one CERCLIS site, and one CA-SLIC-listed site, ranging from 0.3 to 0.8 mile from the project site, were identified that may have the potential to be of environmental concern to future development of the project site due to their location at a higher elevation than the project site, distance to the project site, the expected depth and direction of ground water and surface water flow, the expected storm water flow direction, and the presence of documented contaminant releases that have not been remedied.

As described under the "Environmental Setting," the depth to groundwater at the project site ranges from approximately 33 to 40 feet bgs, with the most recent subsurface borings showing the groundwater level at the project site at 37 feet bgs. The proposed project, which involves the construction of one subterranean parking floor throughout Parcel A and two subterranean parking floors within a portion of Parcel A, would require excavation up to a depth of approximately 25 feet bgs. The proposed project does not involve the construction of any new on-site wells. Therefore, it is not likely that activities associated with the proposed project would come into contact with groundwater at the project site. As a result, the aforementioned hazardous sites in the project area would have minimal potential to impact future development at the project site by means of underground migration and would not constitute a potentially significant impact with respect to the proposed project.

Furthermore, the project site is undergoing remediation activities to reduce VOC and perfluoro compound concentrations in soil vapor associated with former activities at the project site. This remediation also serves a dual purpose by reducing potential contaminants that may have migrated to the project site from nearby hazardous materials sites. Therefore, with the completed operation of the SVE system, as set forth in the recommended mitigation measure presented in this Section, the proposed project would reduce

risks to future project residents, employees, and other visitors associated with contamination from former on-site activities, which would further reduce the less-than-significant impact associated with listed hazardous materials sites.

#### Emergency Response Plan

#### Construction

The removal of the existing structures on the project site and the construction of the proposed project would generally occur within the property boundaries of the project site. No pedestrian or vehicular public right-of-way closures are anticipated during the construction phase. The Bundy Drive portion of the project site is not located along a City-selected disaster route; however, the Olympic Boulevard portion of the project site is located along a segment of Olympic Boulevard that is designated a Cityselected disaster route.<sup>14</sup> The haul routes proposed for the construction process would either have construction-related traffic turn south onto Centinela Avenue from the project driveway on Olympic Boulevard (i.e., the future Park Lane), or south from the project driveways along Bundy Drive, to access the I-10 Freeway. Neither haul route would involve construction-related traffic traveling along Olympic Boulevard for any substantial distance. Furthermore, with respect to nearby hospitals, the project site is approximately 1.5 mile from the nearest facilities, which include Saint John's Health Center, located at 1328 22<sup>nd</sup> Street, and UCLA Healthcare Center, located at 2121 Wilshire Boulevard. While these locations could potentially be accessed via Olympic Boulevard or Bundy Drive, it is more likely that ambulances and other emergency vehicles would access the hospitals via Santa Monica Boulevard, Wilshire Boulevard, or Arizona Avenue from the east or west, or via 20th Street, 21st Street, or 22nd Street from the north or south. As such, the construction of the proposed project would not substantially impede public access or travel upon a public right-of-way such that it would interfere with an adopted emergency response or evacuation plan, and impacts would be less than significant.

# Operation

The proposed project would involve residential, retail/commercial, and restaurant uses within Parcel A, and medical office and pharmacy space within Parcel B. For the proposed buildings that would be over 75 feet in height (i.e., Buildings C, D, and E and the tallest portions of Buildings A and B), the proposed project would be required to establish, implement, and maintain on file an emergency response plan, and would be inspected annually by the LAFD (see LAMC Sec. 57.33.19). As part of this emergency response plan, evacuation signs would be located in every elevator lobby above and below ground, in other conspicuous floor locations, and in each dwelling unit, guest room, and office area. All emergency

<sup>&</sup>lt;sup>14</sup> City of Los Angeles, Safety Element, Exhibit H: Critical Facilities and Lifeline Systems in the City of Los Angeles, April 1995.

plans, procedures, and evacuation signs would be submitted to the LAFD for inspection and approval prior to their implementation and would be properly maintained.

In addition, as discussed under "Routine Transport, Use, or Disposal of Hazardous Materials," with respect to Parcel B, proposed medical office and pharmacy businesses that handle in excess of 500 pounds or 55 gallons of hazardous materials would be required to prepare and submit a Business Plan to the LAFD. The Business Plan would provide a hazardous materials inventory, establish emergency response procedures, and set forth a training program.

As such, with the preparation, approval, and implementation of both an overall emergency response plan for the entire project site, as well as specific emergency response procedures for the disposal of hazardous materials within Parcel B, the proposed project would have adequate mechanisms in place to ensure the safety of all future project residents, employees, and guests. These mechanisms would further be assured through the implementation of the mitigation measure recommended in this Section which includes LAMC requirements for the proper disposal of hazardous waste in the proposed medical offices and pharmacy. Therefore, impacts related to emergency response and evacuation plans during operation of the proposed project would be less than significant.

# **CUMULATIVE IMPACTS**

Development of the proposed project in combination with the related projects identified in the project vicinity has the potential to increase the use, storage, transport, and/or accidental release of hazardous materials during construction and operation. Specifically, any related projects that are either located on listed hazardous materials sites, involve demolition of structures that may contain hazardous materials, or propose the use of hazardous materials in their operation could potentially combine with the impacts of the proposed project to create a cumulatively significant impact to on- or off-site sensitive uses. However, implementation of the recommended Mitigation Measures F-1 through F-6 presented below would reduce the potential hazard and hazardous material impacts associated with the construction and operation of the proposed project to less-than-significant levels. Each of the related projects would require evaluation for potential threats to public safety, including those associated with routine transport, use, or disposal of hazardous materials; upset and accident conditions involving the release of hazardous materials into the environment; hazardous emissions in proximity to an existing or proposed school; hazardous materials site listing; and interference with an adopted emergency response or evacuation plan. Because hazardous materials and risk of upset conditions are largely site-specific, this would occur for each individual project affected, in conjunction with development proposals on these properties. Further, the Applicants for each of the related projects would be required to follow local, State, and federal laws regarding hazardous materials and other hazards (e.g., filing of an HMRRP and Inventory Program and preparation of a Business Plan). Therefore, with full compliance with all local, State, and federal laws pertaining to hazards and hazardous materials, cumulative impacts would be less than significant.

# **MITIGATION MEASURES**

The following mitigation measures are recommended to address the potential impacts associated with the release of hazardous materials into the environment during the construction of the proposed project:

- (F-1) Prior to the issuance of a demolition permit for any existing on-site structure, the structure shall undergo survey to document the presence of any potential polychlorinated biphenyls (PCBs) within the structure. Any PCBs identified as part of this survey shall be properly disposed of in accordance with all applicable City, State, and federal regulations.
- (F-2) The proposed project shall comply fully with the <u>Asbestos Operations & Maintenance Program</u>, <u>1901, 1925 and 1933 S. Bundy Drive, Los Angeles, California</u>, prepared by Allstate Services Environmental, Inc., November 17, 2005. In addition, prior to the issuance of a demolition permit for any existing on-site structure not previously surveyed, the structure shall undergo an asbestos survey to document the presence of any potential asbestos-containing materials (ACMs) within the structure. Any ACMs identified as part of this survey shall be abated in accordance with South Coast Air Quality Management District Rule 1403 as well as any other applicable City, State, and federal regulations.
- (F-3) A California-licensed and registered asbestos abatement contractor shall remove the ACMs that would be disturbed as a result of planned or other renovations to the subject building(s). The contractor would comply with asbestos consultant specifications for the abatement of these regulated materials in compliance with local, State, and federal regulations.
- (F-4) All construction work where an employee may be occupationally exposed to lead must comply with Cal/OSHA requirements set forth in 8 CCR 1532.1. This regulation requires initial employee exposure monitoring to evaluate worker exposure during work that disturbs leadcontaining materials (lead present in any detectable concentration).
- (F-5) All construction workers shall be required to utilize personal protective equipment (including respiratory protection if deemed necessary) during all demolition activities or any activities that would potentially expose workers to lead impacted dust.
- (F-6) Lead abatement specifications by a Lead Project Monitor/Designer are required for all demolition activities to prevent further contamination of lead dust and OSHA requirements.
- (F-7) Waste items generated during demolition and abatement procedures shall be properly sampled and profiled to determine the final disposition of the waste.
- (F-8) Prior to the issuance of a demolition permit for any existing on-site structure, the structure shall undergo a lead-based paint (LBP) survey to document the presence of any potential LBP within

the structure. Any LBP identified as part of this survey shall be abated in accordance with all applicable City, State, and federal regulations.

(F-9) The Applicant shall comply with all of the conditions set forth in the May 27, 2008 letter from the California RWQCB which determined that no further action is required for soil remediation at the project site. Among the conditions of the letter is the requirement that should soil contamination be detected during future activities at the project site, the RWQCB shall be notified within 72 hours and a health and safety plan shall be implemented to reduce the contamination to an acceptable level. (F-10) The proposed project shall comply with all City, State, and federal regulations governing the proper regulation, use, and disposal of biohazardous materials. Pursuant to Section 57.08 of the City of Los Angeles Municipal Code (LAMC), the Applicant shall file a Hazardous Materials Release Response Plan (HMRRP) and Inventory Program for all businesses that handle in excess of 500 pounds or 55 gallons of hazardous materials at any one time during the year. Such businesses shall also prepare and submit a Business Plan to the City of Los Angeles Fire Department (LAFD) which provides an inventory of hazardous materials used, establishes emergency response procedures, and sets forth a training program.

# LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of the mitigation measures identified above, the proposed project's impacts associated with hazards and hazardous materials would be reduced to less-than-significant levels.

# IV. ENVIRONMENTAL IMPACT ANALYSIS F. HAZARDS AND HAZARDOUS MATERIALS 2. ELECTROMAGNETIC FIELDS

This Section presents an analysis of the potential impact from exposure of people to electric and magnetic fields (commonly called "electromagnetic fields" or "EMFs") associated with a City of Los Angeles Department of Water and Power (LADWP) electrical distribution yard adjacent to the project site (see Figure III-1, Aerial Photograph and Surrounding Land Uses in Section III (Environmental Setting) of this Draft EIR). The LADWP electrical distribution yard is referred to herein as the "LADWP Yard." The information and analysis set forth below is based on data presented in literature prepared in connection with the California EMF Program, a project of the California Department of Health Services and the Public Health Institute. California Public Utilities Commission (CPUC) Decision 93-11-013 created the California Electric and Magnetic Field (EMF) Program, a project of the California Department of Health Services (CDHS) and the Public Health Institute, to research and provide education and technical assistance on the possible health effects of exposure to electromagnetic fields from power lines and other uses of electricity. The most recent and comprehensive governmental review of the scientific literature concerning the health affects of EMFs are presented in the California EMF Programs' "An Evaluation of the Possible Risks From Electric and Magnetic Fields (EMFs) From Power Lines, Internal Wiring, Electrical Occupations, and Appliances, Final Report" dated June 2002 (the "EMF Report").<sup>15</sup> Unless otherwise noted, the following discussion of EMFs and potential risks associated with EMFs is based on the EMF Report.

# ENVIRONMENTAL SETTING

# EMF Background

EMFs include two types of fields of energy created by electric charges: (1) electric fields; and (2) magnetic fields. Electric fields are produced by the voltage or pressure in a wire, such as when an appliance is plugged in but not turned on. Electric fields can be blocked or partially shielded by other objects. The intensity or strength of an electric field is measured in volts per meter (V/m). Magnetic fields are created by the current or flow of electricity through a wire, such as when an appliance is turned on. Magnetic fields can pass through most objects. The intensity of a magnetic field is measured in gauss (G) or tesla (T). Most of the EMFs humans experience on a daily basis comes from sources other than power lines, such as home wiring and plumbing and other common appliances in homes or workplaces, including televisions, computer monitors, microwave ovens, hairdryers, and electric blankets. Sources

<sup>&</sup>lt;sup>15</sup> California Department of Health Services, California Electric and Magnetic Fields Program, An Evaluation of the Possible Risks From Electric and Magnetic Fields (EMFs) From Power Lines, Internal Wiring, Electrical Occupations, and Appliances, Final Report, June 2002, website: http://www.dhs.ca.gov/ehib/emf/ RiskEvaluation/riskeval.html, September 13, 2006.

with high voltage produce strong electric fields, while sources with strong electric currents produce strong magnetic fields.

The strength of both electric and magnetic fields decreases as one moves away from the source, with strength decreasing more quickly with distance from "point" sources like appliances than from "line" sources such as power lines.

For example, as shown in Table IV.F-1, Elecromagnetic Field Measurements, magnetic field is reduced to "background levels" (the naturally occurring amounts) at 3 or 4 feet away from typical household appliances. As depicted in Table IV.F-1 EMF exposure from common household appliances such as televisions, range from 25 to 500 milliGaus (mG), at a distance of 1.2 inches, and is greatly reduced to 0.1 to 2 mG at a distance of 39 inches or more.

Electromagnetic Fields at Home (mG)						
Appliance Type	1.2" away	12" away	<b>39"</b> away			
Microwave Oven	750 to 2,000	40 to 80	3 to 8			
Clothes Washer	8 to 400	2 to 30	0.1 to 2			
Electric Range	60 to 2,000	4 to 40	0.1 to 1			
Fluorescent Lamp	400 to 4,000	5 to 20	0.1 to 3			
Hair Dryer	60 to 20,000	1 to 70	0.1 to 3			
Television	25 to 500	0.4 to 20	0.1 to 2			
Source (adapted): Gaug Field Survey, IEEE Tran. 1998).						

# Table IV.F-1Electromagnetic Field Measurements

### The EMF Mixture

A careful assessment of electromagnetic exposure from power lines, appliances, and occupations reveals what amounts to a complex mixture, which takes into consideration many complex aspects of EMF exposure such as frequency, polarization, distance attenuation, and the human interaction with EMF sources which includes, among other sources, common household appliances. The variety of EMF sources that a person is exposed to throughout any given day is referred to as the "EMF mixture." Each aspect of the EMF mixture varies from instant to instant to form a time series of intensities that can be summarized as a single number by various summary "exposure metrics," which may be more or less biologically active. For example, the exposure metric of ionizing radiation that best predicts biological effects is the simple integral of the exposure time series. The exposure metric that best predicts the effect of an antibiotic might be the integral of blood levels above some threshold. Other electricity-related correlates, including proximity to power lines, internal wiring in homes, and household appliances, are not part of the fields at all, but might be correlated with them. These include contact currents from stray

currents from plumbing and in the earth, and intermittent shocks. These are called the "ingredients" of the mixture.

#### **Measuring EMF Exposure in Homes**

There are several different ways of estimating a person's EMF exposure at home, including: (1) indirectly by assessing the types and proximity of power lines to homes (wire codes); (2) indirectly by taking area (spot) measurements; and (3) directly by taking repeated measurements with a meter worn by a person while at home (personal measurements). Wire coding is a method to classify homes according to the type of, and distance from, nearby power lines. Spot measurements are magnetic field measurements taken at various individual locations throughout a room or area. Each of these ways of measuring a person's home EMF exposure has advantages and limitations. Wire code classifications estimate exposure on the basis of something relatively constant over time, including proximity to different types of power lines. As a result, wire code classifications may provide good estimates of exposure from power lines. The different wire code categories overlap, however, and only consider power lines, not other sources, so wire code classifications may not capture differences in exposure between homes as well as some of the other measurement strategies. Also, wire code classifications may only capture certain types of exposures such as the average level, rather than the level's rate of change. Spot measurements capture more of these differences because they measure actual fields at different locations in the home; however, they are generally only taken at specific locations around the home and at one point in time, and so may not capture people's actual exposure in the areas where they spend time or over the course of a year. Personal measurements capture a person's actual exposure, but generally only measure a short period of time that may not be representative of a person's exposure on a typical day or a person's average annual or lifetime exposure. For purposes of this analysis, the wire code classification method is the most appropriate method to discuss in detail, because the focus of this Section is to address the potential for adverse human health impacts from EMF exposure relative to the proximity of proposed residences to existing distribution lines

Wire codes categorize homes based on the types of power lines near those homes and their distances from it. The wire code classification system is based on the fact that EMF strength decreases with distance from the field source and the assumption that homes near power lines that have the potential to carry more current would have stronger EMFs than homes next to lines that carry smaller amounts of current. Table IV.F-2, Electromagnetic Field Spot Measurements in Residential Areas By Wire Code, shows one type of wire code classification system and also shows the ranges of "spot measurements" (brief EMF measurements taken at different locations) found in different wire code category homes in one study.<sup>16</sup>

<sup>&</sup>lt;sup>16</sup> Lee, G., California Exposure Assessment Study (preliminary findings), California EMF Program, 1996, as cited in California Department of Health Services, California Electric and Magnetic Fields Program, Frequently Asked Questions About Magnetic Fields and Homes, website: http://www.dhs.ca.gov/ehib/emf/ general.html#homesfact, September 13, 2006.

Using this system, all homes fit into one of four possible categories based on the type and distance of nearby power lines. These four categories are intended to reflect different levels of EMF exposure from power lines. Though the highest fields are found in homes in the highest categories, spot measurements in the homes show that there is a great deal of overlap between the EMF found in the different categories.

	Electromagnetic Field Spot Measurements (in mG)											
Percentile	Under Line			Outdoor and Front Door			Indoor					
	UG	OL	OH	VH	UG	OL	OH	VH	UG	OL	OH	VH
Mean	Х	1.2	2.2	3.3	0.8	0.7	1.1	1.5	0.8	0.9	1.1	1.5
10%	Х	0.5	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
50%	Х	0.9	1.1	1.5	0.7	0.6	0.8	0.9	0.7	0.7	0.9	0.9
90%	Х	2.0	5.0	6.1	1.3	1.2	1.9	3.2	1.2	1.5	1.7	2.8
OL (Ordinar 150 feet from OH (Ordinar minor primar VH (Very Hig primary distr <b>Spot Measur</b> Under Line: Outdoor and Indoor: Mea Source: Lee, as cited in Frequently http://www.du	a mino y High y, or w, gh): Th ibution <b>ement (</b> Measur Front 1 sures in , G., Ca Califor Ask	r prima ): The ithin 50 ae hous line. C <b>atego</b> red dira Door: A uside th uliforni nia Do ed	ary dist e house ) feet of e is wit ries: ectly un Measur e home a Expo. epartme Questa	ribution is 50-12 certain hin 50 fe derneath ed in the being su sure Asso nt of H cons	line, or 5 29 feet fr types of s eet of a tr outdoor urveyed. essment S lealth Se About	1-150 fee om a tra econdary ansmissio er lines n areas on Study (pro rvices, C Magr	t from ma nsmission distribut on line or earest the the prope eliminary California aetic	ost second n line or tion lines. r major pr e home be erty of the findings, Electric Fields	dary distr major pr rimary or eing surve e home be ), Califor	ibution li rimary, 2. within 2 eyed. ing surve nia EMF	nes. 5-64 feet 5 feet of ryed. Program Fields P	from a a minor 1, 1996;

 Table IV.F-2

 Electromagnetic Field Spot Measurements in Residential Areas By Wire Code

It should be noted that, while the average EMF in homes served by underground lines is lower than those served by above ground lines, these homes still have EMF from other sources such as wiring and appliances.<sup>17</sup>

<sup>&</sup>lt;sup>17</sup> The reason that underground lines usually produce lower fields in nearby homes than overhead lines is not because the dirt blocks the magnetic field, but rather because several heavily insulated cables can be placed closer to each other than relatively uninsulated overhead cables, allowing the magnetic fields from the different cables to cancel each other out. Nonetheless, magnetic fields directly above an underground line can be quite high because they are only a few feet below the surface.

### **EMF Research on Potential Adverse Health Effects**

Power lines and wiring in buildings and appliances generate 50 and 60 Hertz (Hz) fields (also known as extremely low frequency fields or "ELF"). It has not been determined whether exposure to 50 and 60 Hz fields represents a potential health risk. Three kinds of studies have been done to explore this: (1) laboratory studies that expose human or animal cells or organs to EMF, looking for biological changes; (2) laboratory studies that expose animals to EMF, looking for changes in body function, chemistry, behavior or general health; and (3) "epidemiological" studies that observe people's health and evaluate whether groups that have high or unusual EMF exposure have a greater chance for developing a disease like cancer than groups with "normal" or usual exposures.

These studies are inconclusive for several reasons. First, these studies do not show a clear pattern of health hazards. Some, but not all, animal and cell studies have shown biological changes linked with EMF exposure. However, it is not clear whether these biological changes would be the same in humans. Second, it is not clear which component (frequency, strength, harmonics, etc.) of EMF exposure might be hazardous. Concern about possible health hazards from electric power use is supported by results of some scientific studies, but the evidence they provide is still incomplete and inconclusive and even, in some cases, contradictory. Most, but not all, epidemiological studies show an association between leukemia (a type of cancer) and an "indirect" estimate of high EMF exposure, such as living very near a power line with high EMFs or working where there is high electrical exposure. These estimates may not really represent a person's true exposure at the critical time period when they may have started developing an illness. Also, these studies show that some estimates of EMF exposure might be related to cancer, but this does not necessarily mean that magnetic fields cause cancer. Indirect ways of estimating exposure may unintentionally include other risk factors like chemicals used at work or living in a particular neighborhood.

### Special Committee of the National Research Council (1997)

In 1996, a special committee of the National Research Council (NRC) made a careful review of 11 epidemiological studies examining the relationship between childhood leukemia and residential proximity to power lines.<sup>18</sup> The NRC made a statistical summary and comparison of these 11 studies. They concluded that children living in high current configuration houses are 1.5 times more likely to develop childhood leukemia than children in other homes. Despite this conclusion, the NRC was unable to explain this elevated risk and recommended that more research be done to help clarify the issue. One reason for this uncertainty is that wire-code classification assumes that houses with high wire-codes have

<sup>&</sup>lt;sup>18</sup> California Department of Health Services, Electric and Magnetic Field Program, Electric and Magnetic Fields Measurements and Possible Effect on Human Health – What We Know and What We Don't Know in 2000, Long Fact Sheet, December 2000, p. 5, website: http://www.dhs.ca.gov/ehib/emf/longfactsheet.PDF, September 13, 2006.

higher EMF levels than low wire-code houses, but high wire-codes may also be a proxy for some type of exposure besides magnetic fields that is not yet understood. For example, high wire-code houses tend to have higher traffic density nearby, resulting in higher air pollution levels. However, traffic density seems to be an unlikely explanation for the wire-code association found in these studies. In 1997, the NRC statement seemed to be contradicted by the findings of Dr. M. S. Linet of the National Cancer Institute in a large epidemiological study.<sup>19</sup> Her researchers estimated exposure to EMFs in two ways, wire-codes as defined above (based on distance of different types of power lines near the home) and home area measurements. The study found no association between living in high wire-code houses and childhood leukemia. On the other hand, the study found that children living in houses with high average EMF levels did have higher rates of cancer in general.

### EMF Rapid Program Study (May 1999)

In 1998, a working group of experts gathered by the federal National Institute of Environmental Health Sciences' (NIEHS) Electric and Magnetic Fields Research and Public Information Dissemination (EMF RAPID) Program reviewed the research on the possible health risks associated with EMF. The findings of the EMF RAPID Program study, published in the "NIEHS Report on Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields" in May 1999 showed that a majority felt that the epidemiology studies of childhood leukemia provided enough evidence to classify EMF as a "possible human carcinogen," meaning they felt it might cause cancer. However, this does not mean that it does cause cancer.<sup>20</sup>

### EMF Report (June 2002)

As stated previously, the most recent and comprehensive review of the scientific literature concerning the health effects of EMF exposure is contained in the CDHS California EMF Programs' EMF Report dated June 2002.<sup>21</sup> The EMF Report was conducted by three experts in the field who conducted a review of the most relevant existing scientific literature (including the literature referenced above) and evaluated it in

<sup>&</sup>lt;sup>19</sup> Linet MS et al. Residential exposure to magnetic fields and acute lymphoblastic leukemia in children. New England Journal of Medicine, 1997; 337:1-7.

<sup>&</sup>lt;sup>20</sup> National Institute of Environmental Health Sciences, Electric and Magnetic Fields Research and Public Information Dissemination Program, NIEHS Report on Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields, May 1999, website: http://www.niehs.nih.gov/emfrapid/html/EMF\_DIR\_RPT/ NIEHS\_Report.pdf, September 13, 2006.

<sup>&</sup>lt;sup>21</sup> California Department of Health Services, California Electric and Magnetic Fields Program, An Evaluation of the Possible Risks From Electric and Magnetic Fields (EMFs) From Power Lines, Internal Wiring, Electrical Occupations, and Appliances, Final Report, June 2002, website: http://www.dhs.ca.gov/ehib/emf/ RiskEvaluation/riskeval.html, September 13, 2006.

consultation with peer reviewers. To integrate and extend their body of knowledge, the EMF Program contracted with specialists in biophysics, statistics, and animal experimentation to prepare a background in critical literature review in their respective fields and to make sure that the literature review was up to date through June 2000 (P. Gailey, Ph.D., G. Sherman, Ph.D., W. Rogers, Ph.D., and A. Martin, Ph.D.). While there are important differences between the three CDHS reviewers' conclusions, the DHS scientists were more inclined, and in some cases significantly more inclined, to believe that EMF exposure increased the risk of certain health problems than the majority of the members of scientific committees convened to evaluate the scientific literature by the NIEHS Working Group in 1998, the International Agency for Research on Cancer (IARC) in 2001, and the British National Radiological Protection Board (NRPB) in 2001. As such, the opinions cited in the EMF Report apparently reflect a conservative review of the scientific literature on EMF and, therefore, form the basis for a conservative EIR analysis. The EMF Program's policy analysis required each of the three DHS scientists to express in numbers their individual professional judgments that the range of added personal risks suggested by the epidemiological studies were "real." They did this as a numerical "degree of certainty" on a scale of 0 to 100.

The result of the analysis showed that all three of the CDHS scientists were inclined to believe that EMFs can cause some degree of increased risk of childhood leukemia, adult brain cancer, Lou Gehrig's Disease (ALS) and miscarriage. With respect to miscarriage and ALS, all three reviewers were close to the dividing line (i.e., just over 50% degree of certainty). With respect to adult brain cancer, two of the three scientists were "close to the dividing line", and only Reviewer 1 was "prone to believe". With respect to childhood leukemia, Reviewer 1 "strongly believed" while the other two reviewers had far weaker opinions.

The CDHS scientists also strongly believed that EMFs do not increase the risk of birth defects, or low birth weight. They strongly believed that EMFs are not universal carcinogens, since there are a number of cancer types that are not associated with EMF exposure. To one degree or another, they were inclined to believe that EMFs do not cause an increased risk of breast cancer, heart disease, Alzheimer's Disease, depression, or symptoms attributed by some to a sensitivity to EMFs. However, all three scientists had judgments that were "close to the dividing line between believing and not believing" that EMFs cause some degree of increased risk of suicide. With respect to adult leukemia, two of the scientists were "close to the dividing or not believing" and one was "prone to believe" that EMFs cause some degree of increased risk.

With the exception of miscarriage, which is common, the other diseases for which EMFs may be a contributing cause (childhood leukemia, adult brain cancer, Lou Gehrig's Disease) have low incidence, with rates between 1/100,000 and 1/10,000 a year. Even doubling such rates and accumulating them over a childhood or a lifetime leaves accumulated lifetime risks between 1/1,000 and 1%. Thus, the vast majority (99%–99.9%) of highly exposed people would still not contract these diseases. Furthermore, calculations suggest that the fraction of all cases of the above-mentioned conditions that one could attribute to EMFs would be no more than a few percent of the total cases (if any). The uncommon, accumulated high EMF exposures implicated by the evidence about these conditions come from unusual

configurations of wiring in walls, grounded plumbing, nearby power lines, and exposure from some jobs in electrical occupations. There are ways to avoid these uncommon accumulated exposures by maintaining a distance from certain appliances and power lines, and changes in home wiring and plumbing.

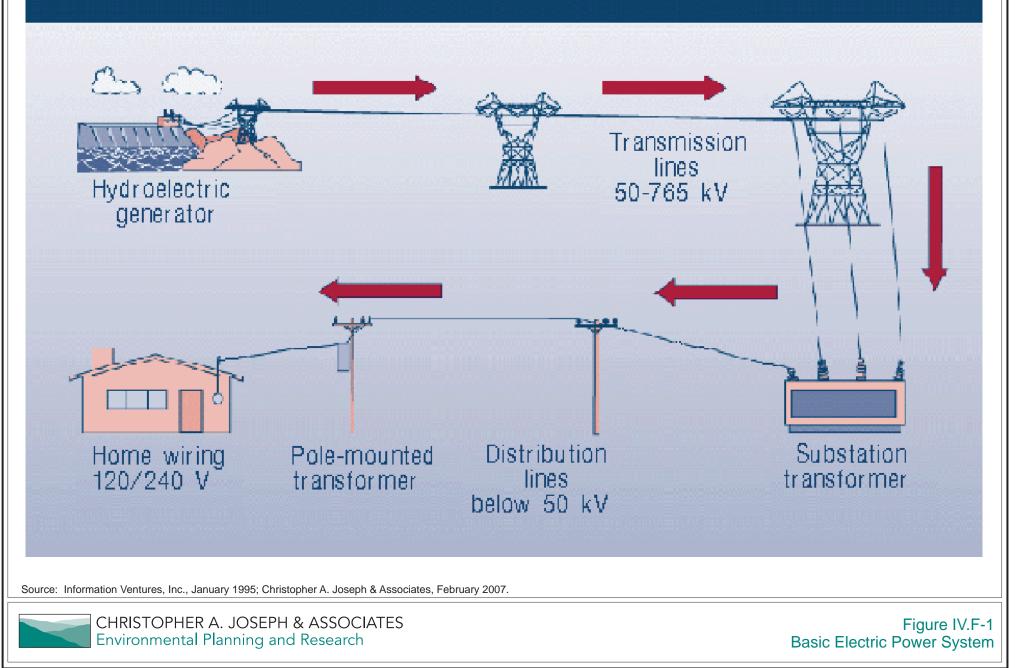
The reviewers also stressed the notion of "mixture" because different aspects of EMF exposure would require different actions for abatement. A variety of electrical phenomena are present in the vicinity of power lines, in-home wiring, plumbing, and appliances. These include electric and magnetic fields with a variety of frequencies and orientations, stray currents from contact with grounded plumbing, and air pollution particles charged by electric fields. The epidemiological studies primarily implicate the magnetic fields or something closely correlated with them. Some researchers think that associated high or low frequency stray contact currents or charged air pollution particles are the true explanation, rather than magnetic fields. The actions one would take to eliminate the fields are not always the same as one would take to eliminate the currents or the charged particles. There are some situations where different and costly measures would be required to address each possible explanation. There are other situations where one or more inexpensive avoidance actions could address all of them. This additional uncertainty about what aspect of the mixture might need to be mitigated will thus provide a challenge for policymakers.

According to the EMF Report, it would not be surprising if it took four more five-year research cycles (i.e., 20 years) to clarify the EMF issue. This would require a long-term commitment to steady research directions. Many prominent researchers who doubt that there are any biological effects, much less epidemiological effects, from the residential and occupational EMF mixture feel there is nothing to find and have recommended that no more funding for this area be provided. The NIEHS suggests that the level and strength of evidence supporting EMF exposure as a human health hazard are insufficient to warrant aggressive regulatory actions and, therefore, does not recommend actions such as stringent standards on electrical appliances or a national program to bury all transmission lines. Instead, the evidence suggests passive measures such as continued emphasis on educating both the public and regulatory community on means aimed at reducing exposures.

### Electric Distribution and Transmission Lines

As shown in Figure IV.F-1, Basic Electric Power System, there are two basic types of power lines: (1) transmission lines; and (2) distribution lines. Transmission lines are high-voltage power lines that carry electric power from electrical generation facilities, such as hydroelectric generation plants, to substations near urban areas. In the United States, most transmission lines operate at voltages between 50 and 765 kilovolts (kV) and at magnetic field ranges between 1 and 80 mG directly underneath the line. Distribution lines are lower voltage power lines that carry power from substations to businesses and homes. Distribution lines operate at voltages below 50 kV and at magnetic field ranges between 1 and

# **Basic Electric Power System**



300 mG at the edge of a right-of-way.<sup>22,23</sup> Electrical substations can serve many functions including transforming the high voltages brought by transmission lines to the lower voltages carried out by distribution lines.

Typical EMF strengths at various distances from transmission lines are depicted in Figure IV.F-2, Typical EMF Levels for Transmission Lines. For a 230 kV transmission line, a typical EMF strength of 57.5 mG measured directly under the line is reduced to 19.5 mG at a distance of 50 feet from the edge of the right-of-way (ROW), and to roughly 7.1 mG at a distance of 100 feet from the edge of the ROW. Residential measurements of EMF levels typically show appreciable morning and evening peaks and a seasonal component which varies by geographic region and closely follows the electrical use patterns of urban residents.<sup>24</sup>

According to the LADWP's EMF Inquiry Line, the LADWP operates two types of 60 Hz distribution lines including 4.8 kV power lines which distribute electricity to single-family homes, and 34.5 kV power lines which distribute electricity to multi-family buildings and commercial structures. Normal EMF levels range from approximately 0.2 mG, in undeveloped areas (i.e., background level), to 5.0 mG, at a distance of 7 to 8 feet from LADWP power lines. EMF levels depreciate rapidly with distance from a source. Sometimes power lines or other sources can cancel each other out or magnify the EMF levels generated. As such, outdoor EMF levels can reach up to approximately 10.0 mG when other EMF sources are located in the vicinity of an LADWP power line.<sup>25</sup>

# **Existing Project Site**

The 11.55-acre project site is located north of Olympic Boulevard, between Bundy Drive and Centinela Avenue in the City of Los Angeles. Nebraska Avenue is located one block north of the project site. The addresses associated with the project site include 1901, 1925 and 1933 Bundy Drive and 12333 Olympic Boulevard. The project site is developed with four structures and two surface parking areas. The existing structures include a 166,283-square-foot single-floor office, research and development, and

<sup>&</sup>lt;sup>22</sup> City of Los Angeles Department of Water and Power; Understanding EMF Electric and Magnetic Fields, website: http://www.ladwp.com/ladwp/cms/ladwp004154.jsp, February 23, 2007.

<sup>&</sup>lt;sup>23</sup> Information Ventures, Inc., EMF-Link, Questions and Answers about EMF Electric and Magnetic Fields Associated with the Use of Electrical Power, Power Lines, January 1995, website: http://infoventures.com/private/federal/q&a/qa-intr3.html, February 23, 2007.

<sup>&</sup>lt;sup>24</sup> T. Dovan, W.T. Kaune, and D.A. Savitz, Bioelectromagnetics, Repeatability of measurements of residential magnetic fields and wire codes, pages 14, 145-159.

<sup>&</sup>lt;sup>25</sup> Phone correspondence with Bill Jones, Office Engineering Technician, City of Los Angeles Department of Water and Power, EMF Inquiry Line, March 14, 2007.

115 kV	1	Approx. Edge of Right-of- way 15 m (50 ft)	30 m (100 ft)	61 m (200 ft)	91 m (300 fi
Electric Field (kV/m) Mean Mag. Field (mG)	1.0 29.7	0.5 6.5	0.07 1.7	0.01 0.4	0.00
230 kV	X	Approx. Edge of Right-of- way 15 m (50 ft)	30 m (100 ft)	61 m (200 ft)	91 m (300 fi
Electric Field (kV/m) Mean Mag. Field (mG)	2.0 57.5	1.5 19.5	0.3 7.1	0.05 1.8	0.01 0.8
500 kV	X	Approx. Edge of Right-of- way 20 m (65 ft)	30 m (100 ft)	61 m (200 ft)	91 m (300 fi
Electric Field (kV/m) Mean Mag. Field (mG)	7.0 86.7	3.0 29.4	1.0 12.6	0.3 3.2	0.1 1.4
	7.0 86.7	3.0 29.4	1.0 12.6	0.3	

Environmental Planning and Research

Typical EMF Levels for Transmission Lines

manufacturing/assembly facility located at 12333 Olympic Boulevard and three single-floor office buildings located at 1901, 1925 and 1933 Bundy Drive, that provide approximately 30,000, 20,000, and 34,000 square feet of office floor area, respectively. All three single-floor office buildings are located along Bundy Drive between La Grange Avenue and Missouri Avenue. The 12333 Olympic Boulevard building is located west of the Bundy Drive buildings and is separated by a surface parking area, extending south in an L-shape configuration to Olympic Boulevard.

### **Existing Surrounding Uses**

The project site is located in a highly urbanized west Los Angeles community. The project area is generally characterized by a mix of commercial, industrial, and low- to medium-density residential uses, with a concentration of commercial uses near the transit corridors of Olympic Boulevard and Bundy Drive. The project site is bounded by surface parking and one- to two-floor commercial and light industrial buildings to the north, followed by Nebraska Avenue and one- and two-floor single-family residences across Nebraska Avenue. The "Parcel A" portion of the project site is bounded by an adjacent television studio followed by a Cadillac auto dealership and service shop to the south while the "Parcel B" portion is bounded by Olympic Boulevard to the south. Parcel A is bounded by Bundy Drive to the east, across which are multi-family residences, a City of Los Angeles animal shelter, Bally's Total Fitness Gym, and Cornerstone Plaza office building. Parcel B is bounded by the Tribeca West office buildings to the west.

# LADWP Yard

The LADWP Yard occupies an approximately nine-acre property to the west and northwest of the project site. The LADWP Yard provides a large surface parking lot immediately adjacent to the project site, which includes the two-floor LADWP West Los Angeles Distribution Headquarters building and several warehouse structures. Further west is LADWP's electrical distribution yard, which includes an area with power line towers that range from approximately 20 to 40 feet tall. The LADWP Yard is bordered to the south by existing businesses (e.g., the VCA Antech Animal Hospital) and Olympic Boulevard, to the west by Centinela Avenue, and to the north by Nebraska Avenue. Residences are located across Centinela Avenue and Nebraska Avenue from the LADWP Yard (see Figure III-1). Some of these homes are located within approximately 100 feet of the nearest power lines within the LADWP electrical distribution yard. Based on correspondence from the LADWP, this facility receives power from outside the City and distributes it throughout the City through a number of overhead and underground 4.8 kV and 34.5 kV power distribution lines within the LADWP Yard and the roadways surrounding the facility. The level of activity at the LADWP Yard varies based on customer demand.<sup>26</sup>

<sup>&</sup>lt;sup>26</sup> Written correspondence from Charles C. Holloway, Supervisor of Environmental Assessment, City of Los Angeles Department of Water and Power, December 7, 2006.

The LADWP's EMF Inquiry Line was contacted regarding measurements of EMF levels at the LADWP Yard. According to the LADWP, EMF measurements were recorded in 1991 to 1992 at the sidewalk along the south side of Nebraska Avenue, just north of the LADWP Yard. EMF levels at this location were approximately 4.0 mG, which is within the normal range of outdoor EMF levels identified by LADWP (i.e., 0.2 to 10.0 mG).

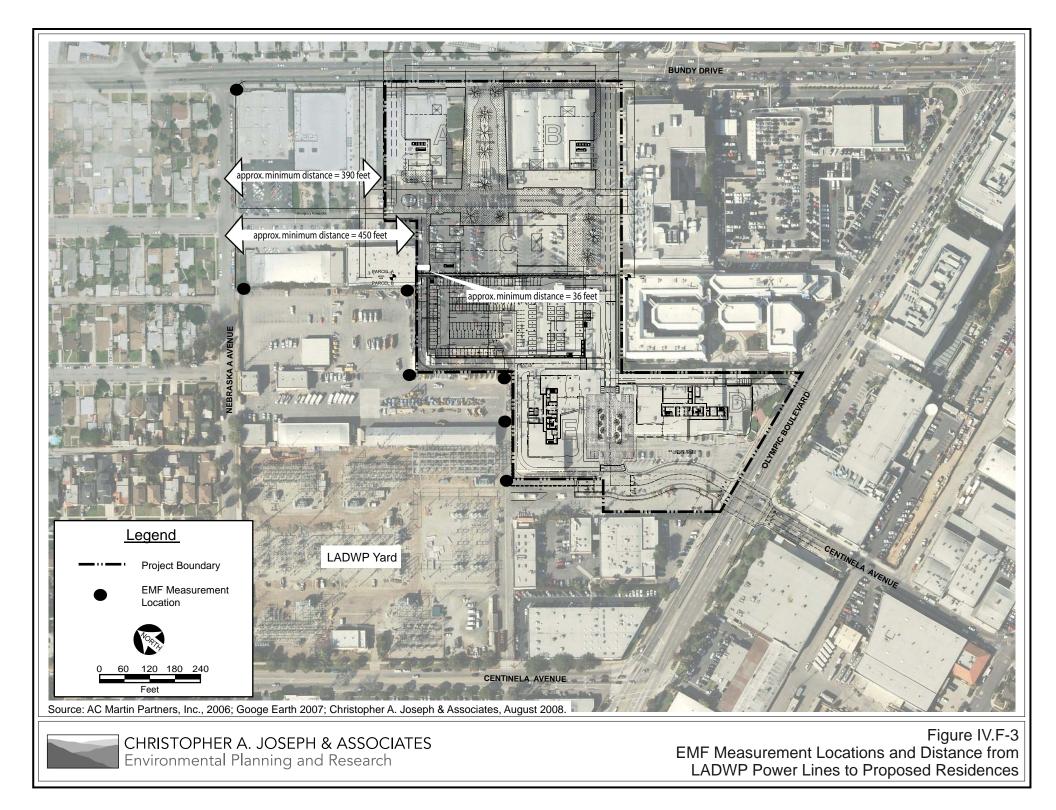
Mr. Bill Jones, LADWP Office Engineering Technician, conducted updated EMF level measurements on April 3, 2007 between approximately 12:00 PM and 12:45 PM (i.e., the time of day when peak power usage normally occurs).<sup>27</sup> As is shown in Figure IV.F-3, EMF Measurement Locations and Distance from LADWP Power Lines to Proposed Residences, EMF measurements were recorded at a total of seven locations along the LADWP Yard's western and southern property lines and along the south side of Nebraska Avenue. EMF levels were recorded ranging from approximately 0.4 to 13.0 mG. The highest EMF level (i.e., 13.0 mG) was recorded along the south side of Nebraska Avenue approximately midblock between Amherst Avenue and Wellesley Avenue, while the EMF level at the southwest corner of Bundy Drive and Nebraska Avenue was recorded at 3.8 mG. According to Mr. Jones, while LADWP maintains both 4.8 kV and 34.5 kV overhead power lines along the entire length of Nebraska Avenue, the higher of these two EMF levels can be attributed to the additional EMF contributions from an underground power line located along a segment of Nebraska Avenue that turns north at Amherst Avenue. This line does not extend as far as Bundy Drive, which explains the lower EMF reading at that intersection. EMF levels at three locations within the LADWP Yard directly beneath a 34.5 kV aboveground power line that runs along its western property line were recorded at 0.4, 0.6, and 6.3 mG.

EMF levels at two locations beneath a 34.5 kV aboveground power line that runs along the LADWP's southern property line were recorded at 0.4 and 5.2 mG. According to Mr. Jones, the highest of the five EMF measurements within the LADWP Yard were taken directly below the endpoints of the two 34.5 kV power lines identified.<sup>28</sup>

On an overall basis, six of the seven EMF measurements recorded were within the normal range of outdoor EMF levels identified by LADWP (i.e., 0.2 to 10.0 mG). Stated differently, as compared to the "VH" classification in Table IV.F-2, three of the seven measurements recorded were below the mean EMF level expected directly under or within 25 feet of a minor primary distribution line (i.e., 3.3 mG) and six of the seven measurements were below the 90<sup>th</sup> percentile (6.1 mG). Table IV.F-2 does not provide values to which the 13.0 mG measurement, which was taken directly above a subterranean power line and below a minor primary distribution line, may be compared.

<sup>&</sup>lt;sup>27</sup> Phone correspondence with Bill Jones, Office Engineering Technician, City of Los Angeles Department of Water and Power, EMF Inquiry Line, March 14, 2007.

<sup>&</sup>lt;sup>28</sup> Field visit with Bill Jones, Office Engineering Technician, City of Los Angeles Department of Water and Power, EMF Inquiry Line, April 3 2007.



Overall, the EMF levels recorded at locations within the LADWP Yard adjacent to the project site were within the normal range of outdoor EMF levels identified by LADWP (i.e., 0.2 to 10.0 mG), with one EMF level reading along Nebraska Avenue only slightly exceeding this range (i.e., 13.0 mG).

# **ENVIRONMENTAL IMPACTS**

#### Thresholds of Significance

Neither the State of California nor the federal government has established specific exposure criteria for EMFs. The State has no adopted policies or regulations that establish a safe or unsafe distance for residential structures from power transmission lines. While the California Department of Education (CDE) has adopted a policy that establishes a setback requirement as part of siting schools in proximity to transmission lines, that standard is solely based on known facts about the reduction in electric fields with increased distance, as opposed to any known biological health risks associated with exposure to EMFs. In any event, no new schools are proposed to be developed as part of the proposed project. Thus, the CDE setback policy for school facilities is not applicable to the proposed project.

Appendix G to the State CEQA Guidelines does not include any specific threshold of significance with respect to EMF exposure. However, Appendix G includes the following general threshold addressing health effects under the subsection "Mandatory Findings of Significance" as follows: "Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? For purposes of this EMF analysis, that general threshold is modified as follows:

• A significant impact would occur if the project would expose individuals to EMFs which would cause substantial adverse effects on human beings either directly or indirectly.

### **Project Impacts**

As discussed above, the EMF Report identifies the multiple levels of uncertainty in the scientific community regarding the potential for a causal relationship between EMF exposure and adverse environmental impacts.

The EMF Report reflects the most conservative review and analysis of the scientific literature on EMF exposure. Even so, the EMF Report did not conclude that EMFs cause any increased risk of adverse biological effects. Rather, as discussed above, the three DHS scientists were inclined to believe, to varying degrees, that EMFs can cause some unspecified degree of increased risk of childhood leukemia, adult brain cancer, ALS and miscarriage. Only one of the three scientists "strongly believed" that EMF contributed to childhood leukemia and none of the scientists "strongly believed" that EMF caused an increase with respect to the other three health problems. In addition, only one of the three scientists was "prone to believe" that EMFs may contribute to adult brain cancer. None of the scientists "strongly believed" or were "prone to believe" that EMFs contribute to the risk of ALS or miscarriage. The scientists were not inclined to believe that EMFs increased the risk of any other health problem.

As noted in the EMF Report, the three diseases for which EMFs may be a contributing cause all have very low incidence rates, between 1/100,000 and 1/10,000 per year in California. Therefore, the vast majority (99-99.9 percent) of highly exposed people would still not contract these diseases. Furthermore, calculations suggest that the fraction of all cases of the above-mentioned diseases that one could attribute to EMFs would be no more than a few percent of the total cases, "if any." The EMF Report cites two recent articles which calculated that approximately 3 percent of all childhood leukemia cases might be attributed to the rare highest residential EMF exposures. Based on 99 deaths attributable to childhood leukemia in California in 1998, that would translate to approximately three deaths in California per year that are potentially attributable to EMFs. It should be noted that this analysis assumes that EMF exposure actually contributes to childhood leukemia, which has not been proven. The EMF Report only concluded that the three reviewers were inclined to believe that there might be a causal link.

It is also highly uncertain as to what aspects of the EMF mixture may contribute to a potential increased risk from EMF exposure. Prior studies and experiments have been flawed and inconclusive. In particular, it has not been determined which aspects of the EMF mixture might potentially contribute to childhood leukemia, adult brain cancer and ALS. Exposure to EMFs at home accounts for only a portion of an individual's daily or a lifetime exposure to EMFs. People are exposed to EMFs throughout the day at work, at school and while using transportation. Furthermore, only a portion of EMF exposure in homes located near overhead power lines is attributable to the overhead power lines. Exposure to EMF within the home comes from a variety of sources, including appliances, wiring in the home, and electronic equipment, the implications of which are beyond the scope of this Draft EIR.

Finally, as discussed above, the EMF Report conclude that it would not be surprising if it took four more five-year research cycles (i.e., 20 years) to determine whether any causal relationship exists between EMF exposure and adverse biological effects, which aspects of the EMF mixture are implicated in any observed health problems, and the extent to which EMFs contribute to various diseases and other health problems.

Based on the EMF Report and the other studies referenced therein, there is insufficient scientific evidence to demonstrate a causal link between EMF exposure from power transmission or distribution lines and adverse health effects on people living in proximity. Notwithstanding this fact, in the interest of full disclosure, the potential EMF exposure to the proposed residences is addressed below.

As discussed above, the project site is located east of a large LADWP Yard that includes several structures, surface parking, and an electrical distribution yard. As shown in Figure IV.F-3, the proposed project would provide three residential and parking buildings with ground floor retail, including Buildings A and B, providing up to five floors plus a mezzanine and located fronting Bundy Drive, and Building C providing 12 floors plus a mezzanine and located in the interior portion of the project site west of Buildings A and B. The proposed project would also provide three non-residential buildings, including the six-floor medical office building, Building D, located along Olympic Boulevard, the eight-floor medical office building E, located north of Building D, and the seven-floor (plus two

subterranean levels) parking structure, Building F, located in the interior of the project site between Buildings C and E. This analysis focuses primarily on the proximity of the proposed residential units to LADWP power lines as the proposed non-residential buildings would generally have employees and visitors during the daytime hours but would not house permanent residents on a 24-hour basis (employees and visitors are not considered to be "sensitive receptors" under CEQA).

The proposed residential and parking building nearest to the LADWP Yard would be the Building C, providing 12 floors plus a mezzanine and which would have approximately 150 feet of its north facade facing the LADWP Yard's surface parking lot. Building A, providing up to five floors plus a mezzanine and located just east of Building C, does not directly abut the LADWP Yard; however, its approximately 240-foot northern façade would be oriented towards Nebraska Avenue, where LADWP provides several overhead and underground power lines. As shown by the most recent EMF readings conducted at the LADWP Yard, the EMF level along the LADWP Yard's western boundary nearest to the location of the proposed Building C is on the lower end of the normal range for background EMF levels (i.e., 0.6 mG). The only recorded EMF level in the vicinity of the project site that slightly exceeds the normal background range (i.e., 13.0 mG) was recorded along the south side of Nebraska Avenue, approximately 450 feet north of the location where the 0.6 mG reading was recorded. As shown in Figure IV.F-3, independent of intervening structures, proposed residential units within Buildings A and C could be located as close as approximately 390 to 450 feet, respectively from Nebraska Avenue. However, intervening one- to two-floor structures north of the project site would shield most of the lower floors within Buildings A and C from a direct line of sight of Nebraska Avenue. Building B, which also ranges up to five floors plus a mezzanine, would be completely shielded from Nebraska Avenue by the aforementioned intervening structures as well as Building A of up to five floors plus a mezzanine and Building C of 12 floors plus a mezzanine.

As described previously in this Section, EMF levels decrease substantially with distance from the source (see Figure IV.F-2). Based on the wire code classification method illustrated in Table IV.F-2, the relative level of magnetic field exposure for properties can fall within "Very High," "Ordinary High," and "Ordinary Low" classification levels based on distance from transmission lines, major and minor primary distribution lines, and secondary distribution lines. With respect only to distribution lines, the "Very High" classification relates to homes located within 50 feet of major primary distribution lines and 25 feet of minor primary distribution lines; the "Ordinary High" classification relates to homes located between 50 and 129 feet of major primary distribution lines, 25 to 64 feet from minor primary distribution lines, or 50 feet of secondary distribution lines; and the "Ordinary Low" classification relates to homes located between 130 and 150 feet from major primary distribution lines, 65 to 150 feet from minor primary distribution lines, or 51 to 150 feet from secondary distribution lines. EMFs from distribution lines are reduced to background levels (i.e., the typical amount a person might encounter even if that source were not present) at about 150 feet from a major primary distribution line, 65 to 150 feet from minor primary distribution lines, and 51 to 150 feet from secondary distribution lines. As discussed previously in this Section, for 230 kV transmission lines, a typical EMF strength of 57.5 mG measured directly under a line is reduced to 19.5 mG at a distance of 50 feet, and to roughly 7.1 mG at a distance of 100 feet (see Figure

IV.F-2). In comparison, EMF exposure from a common household appliance such as a microwave falls in the 40 to 80 mG range at a distance of 12 inches (see Table IV.F-1). Nonetheless, because the distribution lines both within and exiting the LADWP Yard provide relatively low voltages (i.e., 4.8 kV and 34.5 kV), associated EMF levels are much lower than a 57.5 mG level that might be found under a major 230 kV transmission line and it is most appropriate to compare the EMF levels observed to the "wire code" classification system discussed above for major primary and secondary distribution lines.

Because an EMF level of 0.6 mG was observed beneath LADWP's 34.5 kV power line that is directly adjacent to the project site (see Figure IV.F-3), the EMF level of 13.0 mG observed at a distance of approximately 450 feet from this location clearly diminishes to within the lower end of the normal background range for EMFs identified by the LADWP upon reaching the project site. It should be noted that the 0.6 mG EMF reading was recorded approximately 25 feet below the 34.5 kV power line that runs along the western LADWP Yard boundary. Therefore, the proposed residences within the second floor of Building C would potentially be located at eye level with this power line. Nonetheless, due to the setback of a minimum of 36 feet between the proposed residences in Building C and the property line (see Figure II-4 in Section II), the EMF level at these future residences that could be attributed to this power line is expected to be similar to the 0.6 mG ground reading observed at ground level beneath the power line. For further comparison, as shown in Table IV.F-2, the 0.6 mG level is well below the mean EMF level of 3.3 mG expected directly under or within 25 feet of a minor primary distribution line. In fact, 0.6 mG is lower than the EMF levels observed at 90 percent of homes located within the same distance of a minor primary distribution line. EMF levels at the project site can be stated to be virtually unaffected by EMFs associated with both neighboring aboveground LADWP power line as well as LADWP's nearby underground power line. Therefore, while there is no conclusive evidence showing that the proximity of a home to a power line has a direct correlation to adverse human health effects, the distance and EMF levels observed at the nearest LADWP power lines render unlikely the potential for EMFs to affect the health of future project residents. While hazards associated with EMFs are considered less than significant, due to the general public interest in this issue, a mitigation measure has been included to ensure that future project homeowners are provided at the time of purchase with information about the nearby power distribution yard.

# **CUMULATIVE IMPACTS**

Of the 58 identified related projects, only two are located in proximity to the LADWP Yard, including Related Project No. 19, a 151,000-square-foot office building at 12233 Olympic Boulevard, directly adjacent to the east of the project site along Olympic Boulevard, and Related Project No. 52, an auto dealership expansion located at 3300 Olympic Boulevard two blocks west of the project site across Olympic Boulevard. Neither of these related projects would provide residential uses that would be expected to house permanent residents on a 24-hour basis nor are they known to include any major sources of EMFs in their proposed operations. Furthermore, while there is no conclusive evidence showing that proximity to power lines has a direct correlation to adverse human health effects, if a potential impact were to occur with respect to either related project, this would be independent of any

potential impact that could occur at the project site. Therefore, the proposed project would not combine with the related projects to create a cumulative impact to EMFs and cumulative impacts would be less than significant.

## MITIGATION MEASURES

No significant impacts associated with operation of the proposed project adjacent to the neighboring LADWP electrical distribution yard have been identified. Therefore, no project-specific mitigation measures are required. However, in the interest of full disclosure with respect to the scientific community's uncertainty of any potential health risks associated with EMF exposure, the following operational mitigation measure is recommended:

- (F-11) The project Applicant shall provide an electric and magnetic field (EMF) information and disclosure statement to each prospective buyer for all proposed residential units. Such statement shall include, but not be limited to, the following:
  - The location of the neighboring City of Los Angeles Department of Water and Power (LADWP) electrical distribution yard with respect to the project site;
  - A statement that this subject has been addressed in the EIR for the proposed project and that the EIR is on file with the City of Los Angeles Department of City Planning.
  - A statement that additional information regarding the potential health effects from EMF exposure may be obtained by viewing available information posted on the California Department of Health Services' (DHS) official internet site at <a href="http://www.dhs.ca.gov/ehib/emf/RiskEvaluation/riskeval.html">http://www.dhs.ca.gov/ehib/emf/RiskEvaluation/riskeval.html</a> or by contacting the LADWP EMF inquiry line at (213) 367-2616.

# LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed project's impacts associated with exposure to EMFs would be less than significant.