# IV. ENVIRONMENTAL IMPACT ANALYSIS D. HAZARDS AND HAZARDOUS MATERIALS

# 1. INTRODUCTION

This section provides an analysis of potential impacts that would occur relative to hazards and hazardous materials through implementation of the proposed Project. The analysis considers the potential impacts associated with the following: the transport, use, or disposal of hazardous materials that could occur during construction and operation of the Project; contamination from existing and former underground storage tanks (USTs); polychlorinated biphenyls (PCBs); asbestos containing materials (ACM); lead-based paint; and methane gas.

The analysis is based on the following documents: 1) Phase I Environmental Site Assessment Report, Multi-Lot Commercial Property, 1102-1136 West 6th Street, 632-636 Lucas Avenue and 611-629 (exclusive of 625) Bixel Street, prepared by LandAmerica Assessment Corporation, dated May 31, 2007; 2) Limited Hazardous Materials Survey of 1136 6th Street and 632 and 634 Lucas Street, prepared by BA Environmental, dated May 30, 2007; 3) Summary of Environmental Document Review and Recommended Remedial Strategy Good Samaritan Hospital Property, 1102 W. 6th Street and 632 Lucas Avenue, prepared by EBI Consulting, dated April 30, 2007; 4) Report of Soil Gas Survey and Soil Sampling at Good Samaritan Hospital Former Laundry/Dry Cleaners Facility at 632A Lucas Avenue, prepared by HVN Environmental Service Co., dated December 15, 2006; 5) Survey of Suspect Asbestos-Containing Construction Materials, prepared by BA Environmental, dated July 2, 2007; 6) Asbestos Survey of the Properties Located at 1136 6th Street, 632 and 634 Lucas Street, Parking Lot Along Lucas Street and Warehouse Building Behind 632 Lucas Street, prepared by Environmental Managers & Auditors, dated August 2006; 7) Redevelopment Opinion Letter prepared by Land America Commercial Services, dated May 10, 2007; 8) Site Assessment Report Lucas Street UST, prepared by Earth Tech, dated June 2008; 9) Human Health Risk Assessment Bixel & Lucas Project 6th Street and Bixel Street Los Angeles, California, prepared by Haley & Aldrich, Inc., dated May 27, 2009; 10) Second Semi-Annual 2010 Groundwater Monitoring Report 1102 West 6th Street Los Angeles, California, prepared by Hydrologue, dated December 13, 2010; 11) Second Quarter 2010 Groundwater Monitoring Report 630-632 Lucas Avenue, Los Angeles, California, prepared by AECOM dated August 2010; 12) Multi-Phase Pilot Test Extraction Report 1102 West 6th Street, Los Angeles California, prepared by Hydrologue, dated July 29, 2009; and 13) Soils Report for UST Inplace Abandonment, 1136 West 6th Street, Los Angeles, California 90017, prepared by AECOM, dated January 29, 2010, as well as other correspondence.

These reports and letters are provided in Appendix D of this EIR.

# 2. ENVIRONMENTAL SETTING

### a. Regulatory Framework

### (1) Hazardous Materials Management

The use, storage, and disposal of hazardous materials are subject to Federal, State, and local regulations as further discussed below.

The Federal Resource Conservation and Recovery Act (RCRA) (42 U.S.C. secs. 6901-6992k) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days or treated or disposed at a facility, any treatment, storage, or disposal unit must be permitted under RCRA.

RCRA allows individual states to develop their own program for the regulation of hazardous waste as long as it is at least as stringent as RCRA. The State of California has developed the California Hazardous Waste Control Law (HWCL) (Health and Safety Code sec. 25100 et seq. and 22 California Code of Regulations [CCR] sec. 66260.1 et seq.) and the U.S. Environmental Protection Agency (USEPA) has authorized RCRA enforcement to the State of California. Primary authority for the statewide administration and enforcement of HWCL rests with California EPA's (Cal-EPA) Department of Toxic Substances Control (DTSC).

The Federal Occupational Safety and Health Act of 1970, which is implemented by the Federal Occupational Safety and Health Administration (OSHA), contains provisions with respect to hazardous materials handling. Federal OSHA requirements, as set forth in 29 Code of Federal Regulations (CFR) Section 1910, et. seq., are designed to promote worker safety, worker training, and a worker's right-to-know.

The U.S. Department of Labor has delegated the authority to administer OSHA regulations to the State of California. The California OSHA program (Cal-OSHA) (codified in the CCR, Title 8, or 8 CCR generally and in the Labor Code secs. 6300-6719) is administered and enforced by the Division of Occupational Safety and Health (DOSH). Cal-OSHA is very similar to the Federal OSHA program. For example, both programs contain rules and procedures related to exposure to hazardous materials during demolition and construction activities. In addition, Cal-OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program (IIPP). An IIPP is an employee safety program for potential workplace hazards, including those associated with hazardous materials.

The Safe Drinking Water and Toxic Enforcement Act (22 CCR sec. 12000 et seq.), better known as Proposition 65, lists chemicals and substances believed to have the potential to cause cancer or deleterious reproductive effects in humans, restricts the discharges of listed chemicals into known drinking water sources at levels above the regulatory levels of concern, and requires that a clear and understandable warning be given prior to a known and intentional exposure to a listed substance.

At the local level, the City of Los Angeles Fire Department (LAFD) monitors the storage of hazardous materials for compliance with local requirements. Specifically, businesses and facilities that store more than threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program with the LAFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations. The LAFD also issues permits for hazardous materials handling and enforces California's Hazardous Materials Release Response Plans and Inventory Law (Health and Safety Code sec. 25500 et seq.). Basic requirements of California's Hazardous materials networks and Inventory Law include the development of detailed hazardous materials inventories used and stored on-site, a program of employee training for hazardous materials release response, identification of emergency contacts and response procedures, and reporting of releases of hazardous

materials. Any facility that meets the minimum reporting thresholds must comply with the reporting requirements and file a Business Emergency Plan (BEP) with the local administering agency. The LAFD also administers the applicable sections of the Los Angeles City Fire Code, including Division 8, Hazardous Materials Disclosures. Those businesses that store hazardous waste or hazardous materials must submit a Certificate of Disclosure to the LAFD.

### (2) Polychlorinated Biphenyls

PCBs are regulated by the USEPA under the Toxic Substance Control Act (TSCA). These regulations ban the manufacture of PCBs although the continued use of existing PCB-containing equipment is allowed. Transformer oil containing PCBs at a concentration exceeding five parts per million (ppm) is the California-regulated concentration for hazardous waste, though PCBs in transformer oil at a concentration up to 50 ppm are currently allowed in transformers in California. TSCA also contains provisions controlling the continued use and disposal of existing PCB-containing equipment. In addition to TSCA, provisions relating to PCBs are contained in the HWCL, which lists PCBs as hazardous waste.

### (3) Underground Storage Tanks

USTs are regulated under Subtitle I of RCRA and its regulations (40 CFR 280) which establish construction standards for new UST installations (those installed after December 22, 1988), as well as standards for upgrading existing USTs and associated piping. Since 1998, all non-conforming tanks were required to be either upgraded or closed.

The State regulates USTs pursuant to Health and Safety Code, Division 20, Chapter 6.7, and CCR Title 23, Division 3, Chapter 16 and Chapter 18. The State's UST program regulations include among others, permitting USTs, installation of leak detection systems and/or monitoring of USTs for leakage, UST closure requirements, release reporting/corrective action, and enforcement. Oversight of the statewide UST program is assigned to the State Water Resources Control Board (SWRCB) (23 CCR sec. 2610 et seq.), which has delegated authority to the Regional Water Quality Control Board (RWQCB) and typically on the local level, to the fire department. The LAFD administers and enforces Federal and State laws and local ordinances for USTs at the Project site. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by LAFD Inspectors. If a release is documented that affects groundwater, the project file is transferred to the RWQCB for oversight.

### (4) Asbestos Containing Materials

Asbestos is a naturally occurring mineral which is made up of microscopic fibers. Asbestos has unique qualities which include its strength, fire resistance, resistance to chemical corrosion, poor conduction of heat, noise, and electricity, and low cost. Asbestos has been widely used in the building industry for a variety of uses, including acoustic and thermal insulation and fireproofing. It is often found in ceiling and floor tiles, linoleum, and pipes, as well as on structural beams and asphalt. However, asbestos can become a hazard when the fibers separate and become airborne. Asbestos has been linked with lung diseases caused by inhalation of airborne asbestos fibers.

Under the TSCA (40 CFR 763), the USEPA has enacted strict requirements on the use, handling, and disposal of ACM. These regulations include the phase out of friable asbestos and ACM in new construction materials beginning in 1979 (40 CFR 763). Friable asbestos may be found in pre-1979 construction.

California classifies ACM as hazardous waste if it is friable and contains one percent or more asbestos (CCR, Title 22, Section 66261.24). Non-friable bulk asbestos-containing waste is considered non-hazardous regardless of its asbestos content, so it is not subject to regulation under CCR, Title 22, Division 4.5. California, through DTSC, regulates the packaging, on-site accumulation, transportation, and disposal of asbestos when it is a hazardous waste.

The Federal and State OSHA programs regulate asbestos as it relates to employee safety. The Federal OSHA Worker Exposure Rule for Asbestos (29 CFR 1910.1001 and 1926.1101) requires certain actions on the part of any employer whose employees are potentially exposed to asbestos fiber levels above the permissible exposure limit (0.2 fibers per cubic centimeter of air [f/cc], averaged over an 8-hour day). Under Cal-OSHA, employers must begin compliance activities such as notification, employee training, air monitoring and, in some cases, medical surveillance, if employees are exposed to a time-weighted average of 0.1 f/cc over an 8-hour period. In addition to these regulations, contractors involved in asbestos surveys and removal are required to be certified by Cal-OSHA.

The California Connelly Act (Assembly Bill 3713; Health and Safety Code sec. 25915 et seq.) establishes notification requirements for all owners and employees working within any pre-1979 building known to contain ACM. Notification could be based upon a survey of ACM and their locations. The notification requirements of the Connelly Act are enforced by Cal-OSHA.

The USEPA has established National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 61 Part M) that govern the use, removal, and disposal of ACM as a hazardous air pollutant. The NESHAP regulations mandate the removal of friable ACM before a building is demolished and includes notification requirements prior to demolition. The NESHAP regulations are promulgated and enforced by the USEPA. Responsibility for implementing these requirements has been delegated to the State of California, which in turn has delegated the responsibility to the South Coast Air Quality Management District (SCAQMD).

SCAQMD implements the NESHAP through Rule 1403, Asbestos Emissions from Renovation/Demolition Activities. Rule 1403 regulates asbestos as a toxic material and controls the emissions of asbestos from demolition and renovation activities by specifying agency notifications, appropriate removal procedures, and handling and clean-up procedures. Rule 1403 applies to owners and operators involved in the demolition or renovation of ACM-containing structures, asbestos storage facilities, and waste disposal sites. The requirements under Rule 1403 include: surveying structures for ACM; agency notification of intention to remove asbestos; ACM removal procedures and time schedules; ACM handling and clean-up procedures; ACM storage, disposal, and landfill requirements; and record keeping. In addition, any facility known to contain asbestos is required to have a written asbestos management plan (also known as an Operations and Maintenance Program [O&M Program]).

### (5) Lead-Based Paint

Lead is a naturally occurring element and heavy metal that was widely used as a major ingredient in most interior and exterior oil-based paints prior to 1950. Lead compounds continued to be used as corrosion inhibitors, pigments, and drying agents from the early 1950s to 1972, when the Consumer Products Safety Commission specified limits on lead content in such products. While adults can be affected by excessive exposure to lead, the primary concerns are the adverse health effects on children. The most common paths

of lead exposure in humans are through ingestion and inhalation. Lead-based paint is of concern both as a source of exposure and as a major contributor to lead in interior dust and exterior soil.

Cal-OSHA has established limits of exposure to lead contained in dusts and fumes. Specifically, CCR Title 8, Section 1532.1 establishes the rules and procedures for conducting demolition and construction activities and establishes exposure limits, exposure monitoring, and respiratory protection for workers exposed to lead.

### (6) Methane Gas

At very high concentrations, methane can act as an asphyxiant by reducing the relative concentration of oxygen in the air that is inhaled. Methane is odorless, colorless, and extremely flammable. The concentration threshold resulting in a fire from methane is referred to as the lower explosive limit (LEL), which, for methane, is approximately five percent or 50,000 parts per million by volume (ppmv). The upper explosive limit (UEL) is the maximum concentration of methane that can be present in air and still permit combustion or explosion to occur. The UEL for methane is approximately 15 percent or 150,000 ppmv. Consequently, if the concentration of methane is five percent or greater but less than 15 percent, the primary safety risk posed by methane is a risk of fire or explosion. Methane is not toxic.

Methane has the potential to migrate into buildings through physical pathways that include cracks in concrete floor slabs, unsealed conduits or utility trenches, unsealed dewatering sumps, and other small openings common in building construction. Methane gas can also reach the surface through natural geologic features which may facilitate vertical, lateral, or oblique migration. The geologic features that can serve as potential pathways include porous and permeable formations, fault zones, and aquifers.

Worker exposure to methane is regulated by OSHA under 29 CFR §1910.146. This section regulates worker exposure to a "hazardous atmosphere" within confined spaces where the presence of flammable gas vapor or mist is in excess of 10 percent of the lower explosive limit. The Cal-OSHA program regulates worker exposure to airborne contaminants (such as hydrogen sulfide) during construction under Title 8, Section 5155, Airborne Contaminants, which establishes which compounds are considered a health risk, the exposure limits associated with such compounds, protective equipment, workplace monitoring, and medical surveillance required for compliance.

Los Angeles Municipal Code (LAMC), Chapter IX, Article 1, Division 71, Section 91.7103, also known as the Los Angeles Methane Seepage Regulations, provides requirements for buildings and paved areas located in areas classified as being located either in a Methane Zone or a Methane Buffer Zone. Requirements for new construction within such zones include methane gas sampling and, depending on the detected concentrations of methane and gas pressure at the site, installing a barrier (i.e., a membrane shield) between the building and underlying earth, installing a vent system(s) beneath the barrier and/or within the building, and installing a gas (methane) detection system as required by the Los Angeles Department of Building Safety (LADBS).

### **b.** Historical Site Conditions

In 1894, the Project site was undeveloped, except for a single-family residence on the southeast corner. By 1906, two additional single-family residences were present on the eastern and central portion of the Project

site. By 1928, the existing medical office building (1136 W. 6th Street) located on the northwest corner of the Project site was constructed. Additionally, the residence located in the central portion of the Project site was redeveloped as the Bishop Johnson College of Nursing. By 1928, a residential apartment and office building (632 Lucas Avenue) located on the southwest portion of the Project site was also constructed and utilized as a residence for the nurses (since demolished). Another nurse's residence also appears to have been constructed near the southeast portion of the Project site during this time.

In the late 1940s, a gas station with associated service bays (at current service station location) was constructed on the northeast corner of the Project site, though it appears that a smaller gas station may have been present at this location as early as 1933. Also in the late 1940s the existing auditorium (634 Lucas Avenue) located on the southwest corner of the Project site was constructed, which appears to have been part of the Bishop Johnson College of Nursing and/or Good Samaritan Hospital located to the west across Lucas Avenue. In the late 1940s, the residence located on eastern portion of the Project site was converted into apartments, which were then demolished in the mid-1950s.

In the late 1950s, the residence located on the southeast corner of the Project site was also demolished. In the mid-1960s, the building located on the central portion of the Project site (Bishop Johnson College of Nursing), as well as the nurse's residence located on southeast portion of the Project site were demolished.

Since the mid-1960s, the Project site has remained relatively unchanged, with the exception of the existing warehouse building (632A Lucas Avenue) which was constructed on the central portion of the Project site in the early 1980s (a laundry operation was formerly located within the west side of this warehouse building), and the demolition of the residential apartment and office building in the southwest portion of the Project site.

# c. Existing Conditions

The Project site is currently developed with an eight-story medical office building (1136 W. 6th Street). South, as well as east of the medical office building, is a surface parking lot. The northeast corner of the Project site is developed with a former vacant gas station and associated service bays (1102 W. 6th Street), as well as a surface parking lot (632 Bixel Street). The surface parking lot is utilized as a paid public parking lot. The southwest portion of the Project site is developed with an abandoned former auditorium (634 Lucas Avenue). The central portion of the Project site is developed with a warehouse building (632A Lucas Avenue). Surface parking is located south and east of the warehouse.

### (1) Hazardous Materials Management

Small quantities of hazardous substances are currently used on-site including common cleaning, maintenance, and painting supplies, medical supplies, and laboratory chemicals. Small quantities of biohazardous waste are also generated on-site. Because these substances are only used/disposed of in small quantities on the Project site, they do not pose an environmental concern. Additionally, thermostats potentially containing mercury, and chlorofluorocarbon-containing air conditioning units, chillers, and refrigerators are located on-site.

Environmental agency databases were reviewed to ascertain whether the Project site or any properties within a determined radius of the Project site were listed on local, State, or Federal databases. The Project

site is listed on the Hazardous Waste Information System (HAZNET), Leaking Underground Storage Tank (LUST), and Cortese databases. The HAZNET listings pertain to tenants of the medical office building (1136 W. 6th Street) that generated photochemical waste and asbestos waste. Inclusion on the HAZNET database generally indicates compliance with applicable regulations associated with the generation and disposal of such wastes. Therefore, the Project site's listing on the HAZNET database does not present a concern. The LUST and Cortese listings pertain to two open cases of groundwater contamination on the Project site (near the former gas station and the existing warehouse). Both cases are discussed in greater detail in Section 2.c.(3) below.

Several properties located within the vicinity of the Project site were also listed on various databases. Due to the distance of these properties from the Project site, their cross- or down-gradient direction relative to the Project site, and/or their current status (i.e., permit only, case closed, etc.), they are not expected to present a concern to the Project site.

### (2) Polychlorinated Biphenyls

Fluorescent light ballasts are located throughout the buildings on the Project site. Fluorescent light ballasts manufactured prior to 1979 may contain small quantities of PCBs. Since the majority of the Project site was constructed before the 1970s, it is possible that the fluorescent light ballasts contain PCBs. Several fluorescent light fixtures were observed to be of relatively recent manufacture. However, not all the fluorescent light ballasts were inspected. Therefore, some PCB-containing light ballasts may exist within the buildings on the Project site.

A hydraulic elevator is located in the warehouse building (632A Lucas Avenue). Additionally, a hydraulic box crusher is located near the warehouse building. Although the warehouse building was constructed in the early 1980s, the hydraulic oil for the elevator and box crusher may also contain PCBs.

Hydraulic lifts may be located within the service bays associated with the former gas station. Since the former gas station was constructed prior to the 1970s, the hydraulic oil for the lifts may contain PCBs.

Three pad-mounted electrical transformers are located near the warehouse (632A Lucas Avenue). The transformers are owned and operated by the Los Angeles Department of Water and Power (LADWP). Two of the three transformers appeared to be of recent manufacture. The third transformer appeared to be older. All of the transformers appeared to contain insulating oil. While there is moderate potential for the older electrical transformers to contain PCBs, LADWP assumes responsibility for all maintenance and environmental issues regarding these electrical transformers. According to LADWP, although specific information regarding the PCB content of the on-site transformer is unknown, over 98 percent of their transformers have been tested for PCBs. Where PCBs were found, fluids were replaced with non-PCB fluids. Therefore, the electrical transformers do not pose an environmental concern to the Project site.

### (3) Underground Storage Tanks and Sumps

### (a) USTs Near Former Gas Station (1102 W. 6th Street)

Historically, PacBell/SBC (now AT&T) leased a portion of the Project site near the former gas station (1102 W. 6th Street), which included two pre-existing 12,000-gallon gasoline USTs, from Good Samaritan Hospital

from approximately 1991 to 1996. In 1994, PacBell removed the two tanks. PacBell replaced the two USTs with one 12,000-gallon gasoline tank. In 1996, PacBell removed the 12,000-gallon tank. No soil contamination was found in association with the UST removed in 1996. The LAFD issued a closure letter for this UST on May 30, 1997, stating that no further action was required. However, groundwater contamination was found in association with the two USTs removed in 1994 and the case remains open with the Los Angeles RWQCB (LUST File No. 900170143). Based on the long-term use of the former gas station (approximately 1933 to the 1990s), it is possible that the soil and groundwater contamination may be from older USTs that were previously located elsewhere on the former gas station site. However, at this time, the Los Angeles RWQCB has identified AT&T as the responsible party.

As the responsible party, AT&T is required by the Los Angeles RWQCB to conduct quarterly groundwater monitoring on the former gas station site. The Los Angeles RWQCB has stated that elevated concentrations of petroleum constituents and chlorinated VOCs found in the groundwater samples remain a concern.<sup>1</sup> Eleven groundwater monitoring wells are located in the vicinity of the former gas station to quantify the extent of groundwater contamination in the area of the former gas station. According to the Second Semi-Annual 2010 Groundwater Monitoring Report for 1102 West 6th Street, total petroleum hydrocarbons as gasoline (TPHg), benzene, methyl tertiary butyl ether (MTBE), eythylbenzene, diisopropyl ether (DIPE), tertbutyl alcohol (TBA), 1,2-dichloroethane (1,2-DCA), toluene, and xylenes among other constituents have been detected in groundwater samples. The reported levels of benzene and 1,2-DCA exceed the California Maximum Contaminate Level (MCL) for drinking water.<sup>2</sup> The extent of the impacted groundwater from TPHg, benzene, DIPE, and TBA are illustrated in Figures 4 to 7 in the Second Semi-Annual 2010 Report for 1102 West 6th Street. The concentration maps illustrate that contaminated groundwater is contained within the former gas station site (1102 W. 6th Street). However, as discussed below, it is acknowledged that the contaminate plumes extend beyond the former gas station site to the adjacent and down gradient warehouse site at 630-632 Lucas Avenue.

It is acknowledged that contaminate concentrations at the former gas station site (1102 W. 6th Street) are above remedial thresholds for drinking water. While a groundwater mound was observed near one of the monitoring wells (MW 13),<sup>3</sup> according to the Multi-Phase Extraction Pilot Test Report conducted for the 1102 W. 6th Street), there are minimal amounts of groundwater beneath the site and the water would not be used for drinking water. As stated in the Pilot Test Report, recent testing in 2009 has confirmed that there is very little quantity of "groundwater" beneath the site which may more appropriately be categorized as seepage. Furthermore, groundwater is found at variable depths across the site further suggesting seepage as opposed to a continuous layer of water. For example, beneath the former gas station, groundwater is found at approximately 13-15 feet below ground surface. Beneath the medical office building (or Adaptive Reuse Building), groundwater was not encountered to a depth of 40 feet below ground surface yet is only 100 yards away. In summary, the shallow groundwater beneath the site appears to be isolated pockets of groundwater within the subsurface. These areas are not connected to a larger water-bearing zone that is used for drinking

<sup>&</sup>lt;sup>1</sup> State Water Resources Control Board, GEOTRACKER, Closure Review as of 6/10/2009, website: https://geotracker.waterboards.ca.gov/, accessed June 26, 2011.

<sup>&</sup>lt;sup>2</sup> Regulatory levels cited in the Los Angeles RWQCB Site Screening Levels (SSL), calculated in accordance with the Interim Site Assessment and Cleanup Guidebook, Table 4-1, assuming clay soils with >20 feet to groundwater, May 1996.

<sup>&</sup>lt;sup>3</sup> Hydrologue, Inc., Second Semi-Annual 2010 Groundwater Monitoring Report, Prepared for AT&T, December 13, 2010. Refer to Appendix D of this EIR for a copy of this document.

water. In fact, this area of the Elysian Hills is considered "non-water bearing." No groundwater production wells have historically been identified within one mile of the site.

Regardless of the whether there are separate contaminate plumes (one at former gas station site and a separate plume at the warehouse site) as indicated in the Second Semi-Annual 2010 Groundwater Monitoring Report for 1102 West 6th Street or larger plumes as indicated in the Second Quarter 2010 Groundwater Monitoring Report 630-632 Lucas Avenue, according to the Los Angeles RWQCB, it is unlikely that active remediation will be required at the former gas station site.<sup>4</sup> According to the Los Angeles RWQCB, the preferred remedial alternative for the former gas station site is soil removal coupled with natural attenuation with periodic monitoring to assess progress.<sup>5</sup> As stated above, groundwater monitoring occurs on a quarterly basis by AT&T.

In addition, a Human Health Risk Assessment (HHRA) was conducted for the entire Project site (including the former gas station site) to assess impacts to future occupants of the site as a result of Project development. The HHRA considered a compilation of groundwater, soil and soil gas testing results to assess whether there would be any risk to human health as a result of Project development associated with the residual concentrations of hydrocarbons in soil and groundwater. The HHRA concluded that there are no conditions on-site that pose an unacceptable health risk to future occupants of the site and as such, no remediation is necessary regarding soil gas. However, the Los Angeles RWQCB will require the removal of the impacted soil which may be a potential source of ongoing groundwater contamination. The results of the HHRA are presented in further detail in Section 3.c (3), below, in the assessment of Project impacts.

### (b) Underground Storage Sumps Near Warehouse (630-632 Lucas Avenue)

As mentioned above, a laundry operation was formerly located within the west side of the warehouse building (632A Lucas Avenue). The laundry operation also included the use of two concrete sumps for water softening. However, no solvents are known to have been utilized in the water softening process. In 2005, groundwater sampling conducted as part of due diligence activities and adjacent to the warehouse building and the two sumps revealed detectable levels of TPHg and related volatile organic compounds (VOCs). Groundwater in this area is located at a depth of approximately 47 feet below ground surface. In July 2006, trace amounts of TPHg were found in water samples taken from both sumps, while a small amount of trichloroethene (TCE) was found in one water sample. The levels of TPHg and VOCs found in the sumps are typical of incidental stormwater contamination and do not appear to present a concern.

In 2006, upon review of the site's groundwater sampling and known history of contamination, the Los Angeles RWQCB opened LUST File No. 900170216 for the site and named Good Samaritan Hospital as the responsible party, since they were the site owner. As the responsible party, Good Samaritan Hospital is required by the Los Angeles RWQCB to conduct quarterly groundwater monitoring on the site. Three groundwater monitoring wells are located in the vicinity of the warehouse to quantify the extent of groundwater contamination on the site.

<sup>&</sup>lt;sup>4</sup> Summary of Environmental Document Review and Recommended Remedial Strategy Good Samaritan Hospital Property, 1102 W. 6<sup>th</sup> Street and 632 Lucas Avenue, prepared by EBI Consulting, dated April 30, 2007 and included in Appendix D of this EIR.

<sup>&</sup>lt;sup>5</sup> Yi Lu, PH.D., P.G., Chief of Los Angeles River Watershed Unit, Underground Storage Tank Section, California Regional Water Quality Control Board, Los Angeles Region, correspondence dated September 18, 2009 and included in Appendix D of this EIR.

According to the Second Quarter 2010 Groundwater Monitoring Report 630-632 Lucas Avenue, evaluation of the groundwater data indicates that contaminates in the upgradient wells near the former gas station site (1102 W. 6th Street) match the contaminates found in the down gradient wells near the warehouse. Thus, the Second Quarter 2010 Groundwater Monitoring Report 630-632 Lucas Avenue states that this data indicates that there is only one plume from the former gas station that has flowed beneath the warehouse site.

However, it is acknowledged that the Second Semi-Annual 2010 Groundwater Monitoring Report for 1102 West 6th Street indicates that the contaminate plume(s) associated with the former gas station (illustrated in Figures 4 to 7) are entirely contained within the former gas station site in which AT&T is the responsible party. In contrast, the contaminate concentration maps prepared for the Second Quarter of 2010 Groundwater Monitoring Report 630-632 Lucas Avenue show that the higher concentrations in the plumes at the upgradient former gas station site appear to decrease as they migrate to the wells near the warehouse. In other words, the plume is not fully contained in the former gas station site and continues down into the warehouse site.

Contaminate concentration maps for TPHg, benzene and 1,2-DCA that illustrate a larger plume extending from the former gas station site (1102 W. 6th Street) to the warehouse site (630-632 Lucas Avenue), as compared to the maps presented in the Second Semi-Annual 2010 Groundwater Monitoring Report for 1102 West 6th Street, are illustrated in Figures 3 to 5 in the Second Quarter 2010 Groundwater Monitoring Report 630-632 Lucas Avenue. According to the Second Quarter 2010 Groundwater Monitoring Report 630-632 Lucas Avenue, the reported levels of benzene and 1,2-DCA exceed the California Maximum Contaminate Level (MCL).<sup>6</sup> However, it is noted that while contaminate concentrations are above remedial thresholds for drinking water, the water beneath the site would not be usable for drinking water since it is not part of the groundwater table.

Based on the down gradient location of the warehouse site from a known UST release, the fact that there has been no identified historical evidence of ASTs, USTs or fuel release at the site and the similarity in the VOC makeup found in the wells at the upgradient facility, the Second Quarter 2010 Groundwater Monitoring Report 630-632 Lucas Avenue recommends that this LUST case (Case No. 900170216) be combined with the LUST case for the former gas station site at 1102 W. 6th Street (Case # 900170143) and further investigation and future closure be conducted as one project under the directives to the adjacent facility. As of August 2009, the warehouse site Case No. 900170216 remains open with the Los Angeles RWQCB with Good Samaritan Hospital as the responsible party. It is acknowledged that based on the evidence presented in the Second Quarter 2010 Groundwater Monitoring Report 630-632 Lucas Avenue, it is possible that the case may be combined with the LUST case for the former gas station site at 1102 W. 6th Street (Case No. 900170143).

Similar to the groundwater contamination from the former gas station and regardless of the whether there are separate contaminate plumes (one at 1102 W. 6th Street and a separate plume at 630-632 Lucas Avenue) as indicated in the Second Quarter of 2009 Groundwater Monitoring Report for 1102 West 6th Street or larger plumes as indicated in the Second Quarter of 2009 Groundwater Monitoring Report 630-632 Lucas

<sup>&</sup>lt;sup>6</sup> Refer to Table 2 in the Second Quarter 2010 Groundwater Monitoring Report 630-632 Lucas Ave Los Angeles, California, prepared by AECOM dated August 2010. Report included in Appendix D of this EIR document.

Avenue, the Los Angeles RWQCB has stated it is unlikely that active remediation will be required at the warehouse site (630-632 Lucas Avenue). According to the Los Angeles RWQCB, the preferred remedial alternative for the warehouse site is soil removal coupled with natural attenuation and periodic monitoring to assess progress.

In September 2006, soil sampling and a soil gas survey was conducted at the warehouse site. All of the soil samples were non-detectable for TPHg and VOCs. Further, all compounds measured were below the appropriate levels of detection. Soil gas testing revealed trace amounts of benzene (2.3  $\mu$ g/L) and toluene (0.8  $\mu$ g/L) at one sampling location (near the west loading dock), which do not exceed any required remediation thresholds. In addition, no VOCs at any of the soil gas sampling locations were identified. Thus, no soil remediation has been recommended to address existing conditions at this portion of the Project site. However, as stated above, groundwater monitoring occurs on a quarterly basis by Good Samaritan Hospital.

Also, as described above, in 2009 and HHRA conducted for the entire project site concluded for the 630-632 Lucas Avenue property that there are no conditions on-site, including the underground storage sumps near the warehouse, that pose an unacceptable health risk to future occupants of the site and as such, no remediation is necessary regarding soil gas. The results of the HHRA are presented in further detail in Section 3.c (3), below.

### (c) UST Near Existing Medical Office Building (1136 W. 6th Street)

An approximate 3,000 gallon UST was discovered below the sidewalk along Lucas Avenue next to the medical office building (1136 W. 6th Street). The UST was previously used to store heating oil in association with an abandoned oil-fired boiler located in the basement of the medical office building. The case was referred by the City of Los Angeles Fire Department to the RWQCB, Underground Storage Tank Program for further action<sup>7</sup> and was issued a case number by the RWQCB (900170234). Contaminated soils have been removed and the tank abandoned in place, as further described below.

A site investigation of the UST was conducted as part of the Site Assessment Report – Lucas Street UST, prepared by Earth Tech in June 2008. In May 2008, five direct push soil borings (GS-B1, GS-B2, GS-B3, GS-B4, and GS-B5) were drilled ranging in depth from 7 to 44 feet below ground surface to evaluate the lateral and vertical extent of the contamination associated with the UST.

Groundwater was not encountered during the assessment; therefore, no further groundwater sampling was determined necessary. As described further below, the extent of the contamination is not believed to have impacted groundwater. Regardless, groundwater beneath the site is considered to be ephemeral and not usable for drinking water as it is not part of the underlying aquifer.

The assessment also consisted of soil and soil gas sampling for TPH; benzene, toluene, ethylbenzene, total xylenes (BTEX); and fuel oxygenates (e.g., MTBE, oxygenates, and tert-butyl alcohol [TBA]). These results are presented in Table 5-1 of the Site Assessment Report – Lucas Street UST (refer to Appendix D of this EIR) and summarized below.

<sup>&</sup>lt;sup>7</sup> Matthew L. Gatewood, Captain II, Commander Environmental Unit, City of Los Angeles Fire Department, correspondence dated April 26, 2010 and included in Appendix D of this EIR.

Soil Analysis Results: Soil sampling revealed TPH and BTEX in soil borings GS-B1 and GS-B4. No TPH or volatile organic compounds (VOCs) were detected in soil boring GS-B3. No methyl tertiary butyl ether (MTBE) or oxygenates were detected in any soil borings. In soil boring GS-B1, VOC concentrations exceeded the preliminary screening criteria at depths of 20 and 25 feet below ground surface but decreased to below criteria at a depth of 30 feet below ground surface. Benzene concentrations decreased from 3,740 micrograms per kilogram ( $\mu$ g/Kg) at 25 feet below ground surface to 3.6  $\mu$ g/Kg at 30 feet below ground surface. A similar abrupt decreasing trend was exhibited by xylene concentrations. These results suggest that the clayey subsurface soils observed during drilling have prevented the downward migration of contaminants. A similar trend was observed from 20 to 27 feet below ground surface in soil boring GS-B4. Overall, the soils samples revealed that TPH, benzene, toluene, ethyl benzene and xylenes exceeded one or more allowable regulatory threshold levels.<sup>8</sup>

Extent of Impact: Non-detect results in soil boring GS-B3 suggest that lateral migration of soil contamination is limited to approximately 50 feet from the UST. Vertical migration of contamination was found to extend to a maximum of approximately 27 to 35 feet below ground surface. The investigation results have delineated the extent of contamination to the north but field limitations prevented advancing soil borings GS-B2 (in the street west of the UST) and GS-B5 (directly south of the UST). The extent of contamination east of soil boring GS-B1 has not been determined, but movement in this direction is limited by the adjacent building foundation, which is located approximately 10 feet east of the UST, and extends to approximately 15 feet below ground surface.

Soil Gas Analysis Results: Soil gas sampling revealed various VOCs. No VOCs were detected at concentrations exceeding Cal-EPA California Human Health Screening Levels (CHHSL) for shallow soil gas, with the exception of benzene, which exceeded the CHHSLs in all samples. The highest concentrations of VOCs in soil gas were detected in soil boring GS-B1 located southeast of the UST, from a borehole with identified soil impact from 20 and 25 feet below ground surface. Soil gas concentrations of benzene drop approximately two orders of magnitude over a 10 to 15 foot range, as indicated by the benzene levels identified in boreholes GS-B2, GS-B3, and GS-B5. This indicates that the elevated benzene in the soil gas is present in the contaminated zone, but lateral migration of impacted soil gas is limited by the clayey soils.

In January 2010, approximately 15 cubic yards of impacted soils were removed and the tank was abandoned in place. The RWQCB issued a closure letter stating that the site investigation and corrective action for the UST was complete and no further action related to petroleum release is required.<sup>9</sup>

### (4) Asbestos Containing Materials (ACM)

Several of the existing buildings located on the Project site, including the medical office building, auditorium, and gas station, were constructed prior to 1980 and therefore were determined to have the potential to contain ACM. An asbestos survey conducted at the Project site in July 2007, which consisted of 341 samples,

<sup>&</sup>lt;sup>8</sup> Regulatory levels cited in the Los Angeles RWQCB Site Screening Levels (SSL), calculated in accordance with the Interim Site Assessment and Cleanup Guidebook, Table 4-1, assuming clay soils with >20 feet to groundwater (May 1996) Table 4-1. Refer to Table 5-1, Laboratory Analysis Summary, in the Site Assessment Report – Lucas Street UST, prepared by Earth Tech in June 2008, included in Appendix D of this EIR.

<sup>&</sup>lt;sup>9</sup> Samuel Unger, Executive Officer, California Regional Water Quality Control Board, Los Angeles Region, letter dated January 18, 2011 and included in Appendix D of this EIR.

confirmed the presence of ACM within the existing medical office building (1136 W. 6th Street),, the auditorium building (634 Lucas Avenue), and the warehouse building (632A Lucas Avenue). ACM was found in thermal system insulation, floor tile, mastic, joint compound, and wallboard among other materials. It is unclear if suspect ACM is located within the vacant gas station and associated service bays (1102 W. 6th Street). It appears that this area has not been sampled.

### (5) Lead-Based Paint

The medical office building, auditorium, and gas station were constructed prior to the 1970s and therefore were determined to have the potential to contain lead-based paints. A visual lead-based paint survey conducted at the Project site in May 2007 revealed that several layers of paint exist on the walls and mouldings within these buildings. The condition of the paint ranged from poor to good. Severely peeling paint was observed on several of the floors and the exterior of the medical office building (1136 6th Street). Due to the timeframe in which the buildings located on the Project site were constructed, it is likely that one or more of the layers of paint contain lead. It is also likely that some of the glazes on the ceramic tile within the restrooms of the buildings contain lead. No lead-based paint sampling has been conducted at the Project site.

### (6) Methane Gas

The Project site is not located within a City-designated Methane Zone or Methane Buffer Zone.<sup>10</sup> Furthermore, according to Division of Oil, Gas, and Geothermal Resources (DOGGR) records, no oil wells or oil fields are located directly on the Project site. The closest oil field is the Los Angeles City Oil Field, which is located approximately 1/8 mile north of the Project site.

### 3. ENVIRONMENTAL IMPACTS

### a. Methodology

To assist in evaluating potential impacts associated with hazards and hazardous materials that would occur from construction and/or operation of the proposed Project, various reports, as indicated in Section IV.D.I, Introduction, above, were reviewed. Based on the results of the reports, the potential for construction and/or operation of the proposed Project to result in significant impacts associated with hazards and hazardous materials was evaluated.

### **b.** Thresholds of Significance

Appendix G of the CEQA Guidelines provides questions that address impacts with regard to hazards and hazardous materials. These questions are as follows:

Would the project:

• Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

<sup>&</sup>lt;sup>10</sup> *City of Los Angeles Department of Public Works, Methane Ordinance Map A-20960. City Ordinance No. 175,790. (February 4, 2004).* 

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?
- Reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- Is the project 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 it create a significant hazard to the public or the environment?
- 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, would the project result in a safety hazard for people residing or working in the project area?
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

In the context of these questions from Appendix G of the CEA Guidelines, the City of L.A. CEQA Thresholds Guide (2006) states that the determination of significance shall be made on a case-by-case basis, considering the following factors:

### (1) Risk of Upset/Emergency Preparedness

- Compliance with the regulatory framework;
- 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;
- The degree to which the Project may require a new, or interfere with an existing, emergency response or evacuation plan, and the severity of the consequences; and
- The degree to which Project design will reduce the frequency or severity of a potential accidental release or explosion of a hazardous substance.

### (2) Human Health Hazards

- Compliance with the regulatory framework for the health hazard;
- The probable frequency and severity of consequences to people from exposure to the health hazard; and
- The degree to which Project design would reduce the frequency of exposure or severity of consequences of exposure to the health hazard.

Based on these factors, the proposed Project would be considered to have a significant risk of upset/emergency preparedness or human health hazard impact if:

It does not comply with applicable regulations regarding the handling and storage of hazardous
materials; it would consistently increase interference with existing emergency response capacity to
the Project area over existing conditions; or it would expose persons to substantial risk resulting
from the release of hazardous materials or from exposure to a health hazard in excess of regulatory
standards.

### c. Analysis of Project Impacts

#### (1) Hazardous Materials Management

As discussed above, small quantities of hazardous substances are currently used on-site including common cleaning, maintenance, and painting supplies, medical supplies, and laboratory chemicals. Small quantities of biohazardous waste are also generated on-site. Additionally, thermostats potentially containing mercury, and chlorofluorocarbon-containing air conditioning units, chillers, and refrigerators are located on-site. As such, implementation of the proposed Project would result in the generation of hazardous waste during demolition and renovation activities. However, potential impacts from hazardous waste would be reduced to a less than significant level with the incorporation of Mitigation Measure D-1 below.

Construction of the proposed Project would involve the temporary use of hazardous substances in the form of paint, adhesives, surface coatings and other finishing materials, and cleaning agents, fuels, and oils. All materials would be used, stored, and disposed of in accordance with applicable laws and regulations and manufacturers' instructions. Furthermore, any emissions from the use of such materials would be minimal and localized to the Project site. Therefore, impacts from the use of these hazardous substances during construction of the proposed Project would be less than significant.

Operation of the proposed Project would involve the use of typical household, vehicle, and landscape maintenance materials (i.e., cleaning supplies, paints, oil, grease, fertilizers). The use of these materials would be in small quantities and in accordance with the manufacturers' instructions for use, storage, and disposal of such products. Therefore, impacts associated with the use of these hazardous substances during operation of the proposed Project would be less than significant.

### (2) Polychlorinated Biphenyls

Due to the time frame in which the Project site was constructed, PCBs may be present within some fluorescent light ballasts, the insulating oil for the fused cutoffs, and the hydraulic oil for the elevators, box crusher, and service bay lifts located on-site. As such, implementation of the proposed Project could result in generation of PCB wastes during demolition and renovation activities. However, potential impacts from PCB-containing materials would be reduced to a less than significant level with the incorporation of Mitigation Measure D-1 below.

### (3) Soil Gas

A Human Health Risk Assessment (HHRA) was prepared by Haley & Aldrich in May 2009 (refer to Appendix D of this EIR) to estimate potential future health risks from exposure to impacted soil and groundwater at the Project site. Residual soil impacts exist at the site. These soils will either be excavated as part of the Project or will remain beneath pavement or the Adaptive Reuse Building foundation after site redevelopment. This paved and inaccessible area that contains relatively low levels of residual fuel oil

impacts is situated adjacent to the west and south of the Adaptive Reuse Building that will remain on-site and beneath some portion of the southwestern portion of that building. The impacted groundwater is predominantly present beneath the northeastern portion of the site. Groundwater beneath the site will not be used for municipal purposes. Thus, based on the future use of the site, there will be no direct contact with soil or groundwater. There is, however, the potential that residual concentrations of VOCs present in subsurface soil and shallow groundwater beneath the site could volatilize and migrate upward through the overlying building foundation and mix with indoor air. This potential exposure pathway, referred to as subsurface vapor intrusion into buildings, was evaluated in the HHRA.

Potential health risks associated with subsurface vapor intrusion were evaluated using results from soil gas data collected in April 2009 and groundwater data collected between April 2008 and January 2009. The VOC results from each of the soil gas samples were used to estimate potential concentrations in the indoor air in the subterranean level of the Adaptive Reuse Building. The VOC results from each of the groundwater samples collected during the four quarters of groundwater sampling between April 2008 and January 2009 (as described above) were used to estimate potential concentrations in the indoor air of the lower level of the future on-site subterranean parking garage in the New Building. The ventilation system for the subterranean level of the Adaptive Reuse Building would be connected to the ventilation system for the entire building. However, the proposed on-site subterranean parking garage would be ventilated separately from the overlying residential and commercial floors. Thus, VOC vapors migrating through the building foundations and into the indoor air of the proposed on-site subterranean parking garage would not mix with indoor air within the overlying floors.

While it is not expected that any residents would occupy the subterranean level of either building for any appreciable length of time, very conservative exposure scenarios were developed for risk assessment purposes. Future building occupants of the subterranean level of the Adaptive Reuse Building were analyzed to include a child/adult resident that may spend up to 24 hours a day, 7 days per week, 50 weeks per year over 30 years in this structure. Future building occupants in the proposed on-site underground parking garage were analyzed to include commercial and residential receptors. The occupant spending the greatest number of hours within the lower level of the on-site subterranean parking garage was assumed to be a child/adult resident that may spend up to 1 hour a day, 7 days per week, 50 weeks per year over 30 years in this portion of the building.

The estimated human health risks to the future on-site child/adult resident occupying the subterranean level of the Adaptive Reuse Building and the proposed on-site parking garage are less than the assumed acceptable health risk thresholds. Thus, based on the results of the HHRA, the residual chemical impacts at the site do not pose an unacceptable risk to future on-site occupants under the proposed Project and no mitigation for protection of human health is required for soil vapor/gas intrusion. The Los Angeles RWQCB has reviewed the HHRA and the Los Angeles RWQCB has no objection to the Project, but has addressed potential health and safety concerns related to residual contamination in soil that could be exposed during construction.<sup>11</sup> This issue is further discussed below.

<sup>&</sup>lt;sup>11</sup> Yi Lu, PH.D., P.G., Chief of Los Angeles River Watershed Unit, Underground Storage Tank Section, California Regional Water Quality Control Board, Los Angeles Region, correspondence dated September 18, 2009 and included in Appendix D of this EIR.

### (4) Underground Storage Tanks and Sumps

### (a) USTs Near Existing Gas Station and Sumps Near Warehouse

As discussed above, groundwater contamination was found in association with two USTs removed in 1994 from the former gas station (1102 W. 6th Street). The case remains open with the Los Angeles RWQCB with AT&T identified as the responsible party. Groundwater contamination has also been documented near the warehouse building (630-632 Lucas Avenue). This is also an open case with the Los Angeles RWQCB with Good Samaritan Hospital currently identified as the responsible party. As described in the Existing Conditions section above, the groundwater contamination at 630-632 Lucas Avenue may potentially be related to the groundwater contamination at the former gas station (i.e., from the same source) as set forth in the Second Quarter of 2009 Groundwater Monitoring Report 630-632 Lucas Avenue. Regardless of the whether there are separate contaminate plumes (one at 1102 W. 6th Street and a separate plume at 630-632 Lucas Avenue) as indicated in the Second Quarter of 2009 Groundwater Monitoring Report for 1102 West 6th Street or larger plumes as indicated in the Second Quarter of 2009 Groundwater Monitoring Report 630-632 Lucas Avenue, according to the Los Angeles RWQCB, it is unlikely that active remediation will be required at either location.<sup>12</sup> The preferred remedial alternative for both sites is soil removal coupled with natural attenuation and semi-annual monitoring to assess progress. The issue of whether there are separate plumes on the 1102 W. 6th Street Site and the 630-632 Lucas Avenue site is only a matter of who will ultimately be responsible (either AT&T or Good Samaritan Hospital) for future remediation of the site that will include removal/disposal of contaminated soils and/or groundwater during Project construction activities, as well continued future groundwater monitoring activities. To ensure that redevelopment of the Project site would maintain an adequate number of groundwater monitoring wells on-site for semi-annual monitoring of groundwater contamination required by the Los Angeles RWQCB, Mitigation Measure D-2 below is required. Additionally, because the consultants for the responsible parties will likely need to access the Project site during construction and operation of the proposed Project for semi-annual groundwater sampling or other environmental activities, Mitigation Measure D-3 is required.

While no active remediation for groundwater has been required by the Los Angeles RWQCB, groundwater beneath the former gas station site (1102 W. 6th Street) and warehouse site (630-632 Lucas Avenue) will require special handling, treatment, and removal procedures as part of any dewatering activities that may occur during excavation of the site. Although minimal amounts of groundwater are expected to be encountered, Mitigation Measure D-4 is required to address dewatering activities that may occur during construction. Since the groundwater beneath the Project site is not connected to a larger water-bearing zone that is used for drinking water, the site is within an area considered "non-water bearing", and the fact that no groundwater production wells have historically been identified within one mile of the Project site; impacts on drinking water as a result of groundwater contamination would be less than significant.

The Los Angeles RWQCB will require the removal of contaminated soil although the HHRA concluded that on-site soils do not pose a health risk. The removal of contaminated soil would require special handling or disposal. Based on available information to date, it is conservatively estimated that approximately 11,200 cubic yards of contaminated soil may be present on-site which would be excavated as part of construction activities. This is exclusively in the area of the former gas station. No impacted soil was found in the warehouse area. Further, no significant concentrations of contaminates were found in the sumps that

<sup>&</sup>lt;sup>12</sup> Summary of Environmental Document Review and Recommended Remedial Strategy Good Samaritan Hospital Property, 1102 W. 6<sup>th</sup> Street and 632 Lucas Avenue, prepared by EBI Consulting, dated April 30, 2007, included in Appendix D of this EIR.

warrant special removal procedures. To ensure the proper handling and disposal of contaminated soil that may be encountered during excavation of the proposed Project, Mitigation Measure D-5 is required.

In addition, as stated above, the HHRA that was conducted for the Project concluded that there are no unacceptable health risks resulting from vapor intrusion from subsurface conditions and no remediation is necessary. However, as described above, contaminated soil would be removed to address groundwater concerns. As such, impacts would be less than significant.

#### (b) UST Near Existing Medical Office Building

As discussed above, contaminated soils associated with this UST were removed and the UST was abandoned in place. On January 18, 2011 the RWQCB issued a closure letter stating that the site investigation and corrective action for the UST was complete and no further action related to petroleum release is required.<sup>13</sup>

#### (5) Asbestos Containing Materials

An asbestos survey has confirmed the presence of ACM within the existing medical office building (1136 W. 6th Street), the auditorium building (634 Lucas Avenue), and the warehouse building (632A Lucas Avenue). It is unclear if suspect ACM is located within the vacant gas station and associated service bays (1102 W. 6th Street). It appears that this area has not been sampled and an asbestos survey would be required. The Project proposes to demolish all the buildings on-site with the exception of the medical office building which would be renovated. The demolition and renovation of these buildings would have the potential to release asbestos fibers into the atmosphere if they are not properly stabilized or removed prior to demolition or renovation activities. The removal of asbestos is regulated by SCAQMD Rule 1403 and therefore would be removed by a certified asbestos containment contractor in accordance with applicable regulations prior to demolition or renovation. Implementation of Mitigation Measure D-5 below is recommended to ensure compliance with regulatory requirements. For portions of the existing medical office building that would not be disturbed during renovation, ACM should be managed in place with an asbestos O&M Program.

### (6) Lead-Based Paint

Due to the time frame in which the buildings located on the Project site were constructed, it is likely that one or more of the layers of paint contain lead. It is also likely that some of the glazes on the ceramic tile within the restrooms of the buildings contain lead. Because the Project proposes to demolish all the buildings onsite with the exception of the medical office building which would be renovated, the potential for lead exposure is potentially significant and therefore Mitigation Measure D-6 would be required.

### (7) Methane Gas

The Project site is not located within a City-designated Methane Zone or Methane Buffer Zone.<sup>14</sup> Furthermore, according to DOGGR records, no oil wells or oil fields are located directly on the Project site. Therefore, no impacts with regard to methane gas are anticipated to occur.

<sup>&</sup>lt;sup>13</sup> Samuel Unger, Executive Officer, California Regional Water Quality Control Board, Los Angeles Region, letter dated January 18, 2011 and included in Appendix D of this EIR.

<sup>&</sup>lt;sup>14</sup> *City of Los Angeles Department of Public Works, Methane Ordinance Map A-20960. City Ordinance No. 175,790. (February 4, 2004).* 

### 4. MITIGATION MEASURES

- Mitigation Measure D-1: Prior to issuance of demolition permits, the Project Applicant shall evaluate and dispose of hazardous substances in accordance with applicable regulatory requirements. These hazardous substances include but are not limited to laboratory chemicals; biohazardous waste; mercury switches; chlorofluorocarbon-containing air conditioning units, chillers, and refrigerators; and PCB-containing fluorescent light ballasts, insulating oil, and hydraulic oil.
- **Mitigation Measure D-2**: Prior to issuance of demolition permits, the Project Applicant and the responsible parties for any open cases with the Los Angeles Regional Water Quality Control Board shall submit proposed redevelopment plans to the Los Angeles Regional Water Quality Control Board to review and identify which groundwater monitoring wells shall be removed or need to be maintained or replaced for monitoring of the natural attenuation near the former gas station and existing warehouse building.
- **Mitigation Measure D-3**: Prior to issuance of demolition permits, the Project Applicant and the responsible parties for any open cases with the Los Angeles Regional Water Quality Control Board shall develop an access agreement to allow for semi-annual groundwater sampling or other environmental activities as required by Los Angeles Regional Water Quality Control Board during construction and operation of the proposed Project.
- **Mitigation Measure D-4:** The Project Applicant and the responsible parties for any open cases with the Los Angeles Regional Water Quality Control Board shall submit to the Los Angeles Regional Water Quality Control Board a dewatering plan and treatment plan/soil management plan for the handling and disposal of contaminated groundwater/soil that may be encountered during excavation of the Project for review and approval. The dewatering plan/management plan shall include but not be limited to monitoring of excavation activities by a certified environmental consultant to identify/sample groundwater and soil that may be contaminated; and excavation, treatment, and disposal of contaminated groundwater/soil in accordance with applicable regulatory requirements. Written verification from the Los Angeles Regional Water Quality Control Board of approval of dewatering plan/management plan completion shall be submitted to the Department of Building and Safety prior to issuance of grading permit. Excavation of VOC-contaminated soil may require compliance with AQMD Rule 1166, including a mitigation plan approved by the SCAQMD Executive Officer, if concentrations of VOCs as measured with a field instrument are greater than 50 ppm.
- **Mitigation Measure D-5:** Prior to issuance of demolition permits, the Project Applicant shall conduct an asbestos survey of the vacant gas station and associated service bays located at 1102 W. 6<sup>th</sup> Street and submit verification to the City of Los Angeles Department of Building and Safety that a certified asbestos abatement contractor has properly removed asbestos in accordance with procedural requirements and regulations of South Coast Air Quality Management District Rule 1403.
- **Mitigation Measure D-6:** Prior to issuance of demolition permits, the Project Applicant shall submit verification to the City of Los Angeles Department of Building and Safety that a lead-based paint survey has been conducted at all existing buildings located on the Project site. If lead-based paint is found, the Project Applicant shall follow all procedural requirements and regulations for proper removal and disposal of the lead-based paint.

### 5. LEVEL OF SIGNIFICANCE AFTER MITIGATION

All potentially significant impacts would be less than significant with implementation of the mitigation measures outlined above.

## 6. CUMULATIVE IMPACTS

All development located within the vicinity of the Project site would be subject to the same local, regional, State, and Federal regulations pertaining to hazards and hazardous materials. Therefore, with adherence to such regulations, the simultaneous development of the proposed Project and related projects would not result in cumulatively significant impacts with regard to hazards and hazardous materials.