

4.5 HAZARDOUS MATERIALS

This section analyzes potential impacts associated with the use of hazardous materials. It addresses impacts relating to both ongoing industrial activities in the site vicinity and possible historic soil and groundwater contamination onsite. The analysis relies on a Phase I Environmental Site Assessment (Phase I ESA) prepared by Rincon Consultants, Inc. The Phase I ESA is contained in Appendix E.

4.5.1 Setting

a. Project Site Vicinity. The project site encompasses approximately four acres and is currently developed with a public parking lot and an approximately 19,500 square foot (sf) office building. Surrounding land uses include a City of Los Angeles Department of Water and Power facility located to the northwest of the site on the northwest corner of Alameda Street and East Temple Street; the Little Tokyo/ Arts District Metro Gold Line station immediately adjacent to the west of the site; a light industrial/warehouse building and the Japanese American National Museum located across Alameda Street to the west of the project site; a restaurant and surface parking lot to the southwest of the site on the southwest corner of 1st Street and Alameda Street; multi-family residential buildings, a car wash and the Sogo/Chugokaya Hotel located across 1st Street to the south of the site; and a City of Los Angeles Emergency Operations Center and the Nishi Honganjo Buddhist Temple located immediately east of the site. Figure 2-4 in Section 2.0, *Project Description*, shows an aerial photo of surrounding land uses.

b. Regulatory Setting. State and federal governmental agencies regulate the use, storage, and transport of hazardous materials through numerous legal and regulatory requirements. State and federal regulations require businesses that store, use, or manufacture specific amounts of hazardous materials to report the quantities and types of materials to the local administering agency. The federal government defines hazardous materials as substances that are toxic, flammable/ignitable, reactive, or corrosive. Extremely hazardous materials are substances that show high or chronic toxicity, carcinogenic, bioaccumulative properties, persistence in the environment, or that are water reactive.

Soil Contamination Health Risk Assessment. Regulatory agencies such as the United States Environmental Protection Agency (EPA), California State Department of Toxic Substances Control (DTSC), and California State Department of Environmental Health Hazard Assessment set forth guidelines that list at what point concentrations of certain contaminants pose a risk to human health. The EPA combines current toxicity values of contaminants with exposure factors to estimate what the maximum concentration of a contaminant can be in environmental media before it is a risk to human health. These concentrations set forth by the EPA are termed Screening Levels (SLs) for Chemical Contaminants at Superfund Sites or metal concentrations in residential and industrial soils. SL concentrations can be used to screen pollutants in environmental media, trigger further investigation, and provide an initial cleanup goal. SLs for soil contamination have been developed for both industrial sites and residential sites. Residential SLs are more conservative and take into account the possibility of the contaminated environmental media coming into contact with sensitive receptor sites such as nurseries and schools. SLs consider exposure to pollutants by means of ingestion, dermal contact, and inhalation, but do not consider impacts to groundwater.



Soil Contamination and Groundwater Protection. The Los Angeles Regional Water Quality Control Board (RWQCB) has developed an interim guidance document that contains numeric site screening levels to determine the need for remediation of petroleum hydrocarbons and volatile organic compound (VOC) contaminated soils (Los Angeles RWQCB, 1996). The guidance document is used to determine when a site may require remedial action or to establish an acceptable clean up standard for a particular constituent. The document was developed to simplify the remediation process by facilitating the selection of soil cleanup levels for petroleum hydrocarbons and VOC-impacted sites.

Drinking Water Protection. Both the EPA and the California Department of Public Health Services (CDPH) regulate the concentration of various chemicals in drinking water. The DHS thresholds are generally stricter than the EPA thresholds. Primary maximum contaminant levels (MCLs) are established for a number of chemical and radioactive contaminants (Title 22, Division 4, Chapter 15 California Code of Regulations). MCLs are often used by regulatory agencies to determine cleanup standards when groundwater is affected with contaminants.

Recognized Environmental Conditions. A “Recognized Environmental Condition” (REC) is defined pursuant to the American Society of Testing and Materials (ASTM) as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the project site or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Hazardous Materials. The Los Angeles City Fire Department has primary responsibility over hazardous materials incidents within the City. The Health Hazardous Materials Division of the Los Angeles City Fire Department provides emergency response services for hazardous materials incidents within the City. However, depending on the situation and location of a hazardous waste incident, agencies other than the City fire departments would also help provide emergency response.

Lead and Asbestos. Asbestos emissions are regulated by the South Coast Air Quality Management District (SCAQMD). The SCAQMD rule applicable to the project site is Rule 1403, Asbestos Emissions from Demolition/Renovation Activities. Compliance with SCAQMD Rule 1403 requires that the owner or operator of any demolition or renovation activity have an asbestos survey performed prior to demolition. Lead-based materials exposure is regulated by California Occupational Safety and Health Administration (CalOSHA) regulations. California Code of Regulations, §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed CalOSHA standards.

Methane. Chapter IX, Article 1, Division 71, Section 91.7103 of the Los Angeles Municipal Code lays out the Los Angeles Methane Seepage Regulations for buildings and paved areas located in either a Methane Zone or Methane Buffer Zone. The City of Los Angeles methane seepage regulations provide requirements for buildings and paving in areas classified



as a Methane Zone or Methane Buffer Zone.¹ The City has adopted specific testing protocols and design standards related to building in these zones. The City regulations require that a methane gas investigation be conducted to determine the appropriate Site Design Level. There are five Design Levels identified under the City methane seepage regulations. Site Design Level is determined by the Design Methane Concentration, the highest concentration of methane gas, and the Design Methane Pressure, the highest pressure of methane gas, as determined by site testing. Table 4.5-1 specifies the minimum methane mitigation systems, such as the passive, active, and miscellaneous systems, depending on the concentration and pressure of the methane present at the site. Mitigation requirements under the three systems included in Table 4.5-1 are defined below:

- *Alarm System:* a group of interacting elements consisting of components and circuits arranged to monitor and annunciate the status of gas concentration levels or supervisory signal-initiating devices and to initiate the appropriate response to those signals;
- *Cable or Conduit Seal Fitting:* an approved fitting provided in a cable or conduit system to prevent the passage of gases, vapors or flames through electrical cable or conduit;
- *De-watering System:* a permanent water removal system, consisting of perforated pipes, gravel, sump pumps and pits, designed to permanently maintain the ground water level 1 foot below the sub-slab vent system;
- *Gas Detection System:* one or more electrical devices that measure the methane gas concentration and communicate the information to the occupants, building management, central station or alarm company with audible or visual signals;
- *Gravel Blanket:* a layer of gravel, sand or approved material designed to transmit gas to the vent riser without obstructing the venting system;
- *Imperioius Membrane:* a continuous gas barrier made of material approved by the Department of Building and Safety and installed beneath a building for the purpose of impeding methane migration to the interior of the building;
- *Mechanical Extraction System:* a system operated by a machine which is designed to remove methane gas from below the impervious membrane through the use of fans, blowers or other powered devices;
- *Mechanical Ventilation:* a fan, blower or other similar group of interacting elements operated by a machine within the building, which introduce and/or remove air from an enclosed space;
- *Perforated Horizontal Pipe:* an approved pipe which contains a series of small holes or narrow openings placed equidistant along the length of the approved pipe, which is placed horizontally beneath the foundation of a building, for the purpose of venting accumulated methane gas and preventing the development of elevated gas pressures or for drainage of ground water to an approved location;
- *Pressure Sensor:* a device that measures and communicates surrounding gas pressure to an alarm or control system;
- *Single Station Gas Detector:* a device consisting of electrical components capable of measuring methane gas concentration and initiating an alarm;

¹ City of Los Angeles Municipal Code, Section 91.7103.



- *Trench Dam*: an approved subsurface barrier installed within a furrow or ditch adjacent to the foundation of a building, for the purpose of preventing the migration of methane gas beneath that foundation; and
- *Vent Riser*: an approved pipe, which is placed vertically with joints and fittings connected to Perforated Horizontal Pipes to convey and discharge the gas to the atmosphere.

**Table 4.5-1
 Building Methane Mitigation Regulations**

Site Design Level		Level I		Level II		Level III		Level IV		Level V	
Design Methane Concentration (ppmv)		0-100		101-1,000		1,001-5,000		5,001-12,500		>12,500	
Design Methane Pressure (inches of water pressure)		2	>2	2	>2	2	>2	2	>2	All Pressures	
Passive System	De-watering System ¹		X	X	X	X	X	X	X	X	
	Sub-Slab Vent System	Perforated Horizontal Pipes	X	X	X	X	X	X	X	X	X
		Gravel Blanket Thickness Under Impervious Membrane									
		Gravel Thickness Surrounding Perforated Horizontal Pipes									
		Vent Risers	X	X	X	X	X	X	X	X	X
	Impervious Membrane		X	X	X	X	X	X	X	X	X
Active System	Sub-Slab System	Pressure Sensors Below Impervious Membrane							X	X	
		Mechanical Extraction System ²							X	X	
	Lowest Occupied Space System	Gas Detection System ³		X		X	X	X	X	X	X
		Mechanical Ventilation ^{3, 4, 5}		X		X	X	X	X	X	X
		Alarm System		X		X	X	X	X	X	X
	Control Panel			X		X	X	X	X	X	X
Misc. System	Trench Dam		X	X	X	X	X	X	X	X	
	Conduit or Cable Seal Fitting		X	X	X	X	X	X	X	X	
	Additional Vent Risers ⁶										X

Source: http://www.ladbs.org/rpt_code_pub/Methane_Code.pdf

X = Indicates a Required Mitigation Component

¹ See Section 91.7104.3.7 for exception.

² The Mechanical Extraction System shall be capable of providing an equivalent of a complete change of air every 20 minutes of the total volume of the Gravel Blanket.

³ See Section 91.7104.3.1 for Narrow Buildings.

⁴ The Mechanical Ventilation systems shall be capable of providing an equivalent of one complete change of the lowest occupied space air every 15 minutes.

⁵ Vent opening complying with Section 91.7104.3.4 may be used in lieu of mechanical ventilation.

⁶ The total quantity of installed Vent Risers shall be increased to double the rate for the Passive System.

c. Environmental Conditions. The site is located in a highly urbanized area of the City of Los Angeles. As part of this EIR, Rincon Consultants, Inc. prepared a Phase I Environmental Site Assessment (Appendix E), and completed an analysis of potential contamination and



possible conflicts associated with historic or current activity in the project site area. The contamination analysis included: a general environmental database search for the project site area according to the 2005 ASTM guidelines for Phase I Environmental Site Assessments; a reconnaissance of the project site to identify recognized environmental hazards; and review of available environmental reports for the project site area.

Environmental Records Review. Rincon contracted Environmental Data Resources, Inc. (EDR) to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the site and included data from surrounding sites within a specified radius. The EDR report, which specifies the ASTM search distance for each public list, is incorporated by reference and included in the Phase I. Federal, State and County lists were reviewed as part of the research effort. The project site was listed as a release site (leaking Underground Storage Tank (UST)) in the databases searched by EDR. According to the EDR report, leaking USTs located on the project site adversely affected groundwater beneath the site with gasoline. Additionally, the LA Soap Company which formerly included the southern portion of the site (south of Banning Street) and the adjacent eastern properties were listed as having former USTs on the property. The adjacent properties to the north, west and south were not listed in any of the databases searched by EDR. One nearby property to the northwest (Veterans Affairs Outpatient Clinic -351 E. Temple Street) was listed as a leaking UST site in the databases searched by EDR. According to the EDR report, in 1985 a release of gasoline affecting groundwater beneath the nearby site was identified. The case was closed by the RWQCB in 1997. Based on the groundwater flow direction to the southwest, groundwater beneath this nearby site is expected to flow in a cross-gradient direction to the project site and would not be expected to be adversely affecting the project site. The EDR databases indicated that fifteen sites with environmental listings are located within one-eighth mile radius of the project site and are listed in Table 4.5-2.

Sites appear in the following databases:

LUST: *LUST records contain an inventory of reported leaking underground storage tank incidents. This database is maintained by the State Water Resources Control Board.*

RCRA: *RCRAInfo is U.S. EPA's comprehensive information system providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data and recording abilities of the Resource Conservation and Recovery Information System (RCRIS). The RCRAInfo database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by RCRA. Conditionally exempt small quantity generators (CESQG) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQG) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQG) generate over 1,000 kg of hazardous waste or over 1 kg of acutely hazardous waste per month.*



**Table 4.5-2
 GeoSearch Summary Listing of Sites within 1/8 mile of Project Site**

Site Name	Site Address	Distance (miles) and Direction from Project Site	Database Reference
Mangrove Estate, B.V./LA Soap Company/White King Incorporated	617 E. 1 st Street	The subject property is the western portion of this larger site	LUST, HIST CORTESE, RCRA-SQG, FINDS, CA FID UST, SWEEPS UST, EMI
LA Soap Company	530 Banning Street	The subject property is the western portion of this larger site	CA FID UST, SWEEPS UST
LA Soap Company	614 E. 1 st Street	Less than 1/8 mile - south	CA FID UST, SWEEPS UST, HIST UST
Little Tokyo Bonsai Nursery	622 E. 1 st Street	Less than 1/8 mile - south	CA FID UST, SWEEPS UST
T Masumura	118 S. Hewitt Street	Less than 1/8 mile – south	EDR Historical Cleaners
Department of Water and Power	433 E. Temple Street	Less than 1/8 mile – northeast	HAZNET, CA FID UST, UST
Veterans Affairs Outpatient Clinic/USVA Outpatient Clinic	351 E. Temple Street	Less than 1/8 mile – northeast	LUST, HIST CORTESE, RCRA-SQG, FINDS, HAZNET
Japanese American National Museum	100 N. Central Avenue	Less than 1/8 mile – west	UST
Police Repair Shop	135 N. Central Avenue	Less than 1/8 mile – west	CA FID UST, SWEEPS UST
Department of Public Works	145 N. Central Avenue	Less than 1/8 mile – west	CA FID UST, SWEEPS UST
Hikari One Hour Photo	110 Japanese Village Plaza	Less than 1/8 mile - west	RCRA-SQG, FINDS, HAZNET
Tokyo Cleaners	426 E. 2 nd Street	Less than 1/8 mile - southwest	RCRA-SQG, FINDS, HAZNET
Unknown	600 E. 2 nd Street	Less than 1/8 mile - south	CA FID UST, SWEEPS UST
Sunshine Hotel	328 E. 1 st Street	Less than 1/8 mile - west	CA FID UST, SWEEPS UST
LA DWP Materials Testing Lab	510 E. 2 nd Street	Less than 1/8 mile - south	RCRA-SQG, HAZNET, CA FID UST, SWEEPS UST, HIST UST

Source: EDR Report, 2009.

Databases listed in **BOLD** are databases that indicate a release has occurred on the identified property.



HistUST: *The Hazardous Substance Storage Container Database is a historical listing of UST sites. This database is maintained by the State Water Resources Control Board.*

CALSITES: *Historically maintained by the DTSC. Contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.*

CLEANERS: *Data contains a list of drycleaner related facilities that have EPA ID Numbers. These are facilities with certain SIC codes as follows: power laundries, family and commercial, garment pressing and cleaners' agents, linen supply, coin-operated laundries and cleaning, dry cleaning plants except rugs, carpet and upholsterer cleaning, industrial launderers, laundry and garment services.*

SWEEPS UST: *Statewide Environmental Evaluation and Planning System. These underground storage tank listings were updated and maintained by a company contracted by the SWRCB in the early 1980s. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.*

CERCLIS: *Comprehensive Environmental Response, Compensation, and Liability Information System. CERCLIS is a database used by the U.S. Environmental Protection Agency (EPA) to track activities conducted under its Superfund program. Specific information is tracked for each individual site.*

USTCUPA: *Underground Storage Tanks maintained by Certified Unified Program Agencies. The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. The state agencies responsible for these programs set the standards for their program while local governments implement the standards. Cal/EPA oversees the implementation of the program as a whole. City of Los Angeles manages the local database of underground storage tanks.*

CORTESE: *Identified Hazardous Waste and Substance Sites. This database (from the CAL EPA/Office of Emergency Information) identified public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration.*

ENVIROSTOR: *The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]; State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk*



characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Historic Land Use. Historic records were reviewed for the EIR including aerial photographs, topographic maps, historic resource reports, and Los Angeles County Assessor maps. The site has been developed with industrial and commercial uses since 1888. The photos, maps, and city directories reviewed in the Phase I indicate the project site was in industrial and commercial uses from at least 1888 through 1976. It appears that the site structures, with the exception of the existing structure, were demolished in the late 1980s.

Field Reconnaissance Findings. Rincon performed a reconnaissance of the project site on October 21, 2009. The purpose of the reconnaissance was to observe existing site conditions and identify obvious indicators of hazardous materials that could affect the project site.

The project site is currently developed with an at-grade public parking lot and a one-story approximately 19,500 square foot vacant structure (previously in use as medical offices) on the northwestern portion of the site. Adjoining properties include E. Temple Street and a Department of Water and Power facility to the north; a City of Los Angeles Emergency Operations Center and parking lot to the east; MTA light rail lines and N. Alameda Street to the west; and MTA light rail lines, E. 1st Street, a residential condominium complex, and various commercial businesses including a car wash to the south.

During the site reconnaissance, former past uses at the project site and adjacent properties were not readily apparent. Rincon did not observe above-ground storage tanks or evidence of underground storage tanks. Several 55-gallon storage drums were observed that are used as trash containers on the site. No hazardous substances or petroleum products were identified at the site. Unidentified substance containers or unidentified containers that might contain hazardous substances were not observed during the reconnaissance. Strong, pungent, or noxious odors were not observed on the site. No pools of liquid including standing surface water were identified on the site. In addition, sumps containing liquids likely to be hazardous substances or petroleum products were not observed. Rincon observed several transformers on the northwestern side of the onsite structure; however, there was no indication of a release in the vicinity of the transformers. Rincon did not note such conditions as stains, corrosion, clarifiers, sumps, drains, pits, ponds, lagoons, solid waste, debris, fill material, stained soils, stained pavement, wastewater, septic systems, effluent disposal system, or stressed vegetation.

Two groundwater monitoring wells were observed during the site reconnaissance. One groundwater monitoring well was located west of the onsite structure. The second groundwater monitoring well was located on the southwestern portion of the project site.

4.5.2 Impact Analysis

a. Methodology and Thresholds of Significance. The findings of this analysis are based upon the Phase I ESA, performed by Rincon Consultants, Inc., and dated November 2009. The Phase I ESA identifies “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.



The term includes hazardous substances or petroleum products even under conditions in compliance with laws.” The methodologies for the potential for hazards and hazardous materials to be present or created by the development of the site are described below.

Reconnaissance Survey. A reconnaissance of the project site was conducted to observe existing site conditions and activities, noting physical evidence of potential contamination or possible sources of contamination. In addition, the types of general land uses in the vicinity of the project site were noted.

Database List Search. A review of the federal, state, and local database of known or potentially hazardous waste sites or landfills, and sites currently under investigation for environmental violations was conducted. The database was provided by Environmental Data Resources, Inc.

Conducted Inquiries. Inquiries were conducted by telephone to the City of Los Angeles Planning Department for information regarding environmental permits, violations or incidents, and/or the status of enforcement actions at the project site.

Document and Map Review. A review of pertinent, available documents and maps regarding local physiographic and hydrogeologic conditions in the site vicinity was conducted.

Research Historical Land Use. A review of available historical aerial photographs and Sanborn maps of the site and vicinity was reviewed for evidence of previous site activities and development that would suggest the potential presence of hazardous substances at the site.

Archival US Geological Survey Maps. Review and interpretation of archival US Geological Survey (USGS) topographic maps of the site and the area was conducted for information regarding historical land use potentially involving the manufacture, generation, use, storage and/or disposal of hazardous substances.

Title Records. A review of available title records was conducted for the project site.

CEQA Guidelines - Initial Study Checklist

Based on Appendix G of the *CEQA Guidelines*, a significant impact with regard to hazards and hazardous materials would occur if development of the site were to result in any of the following conditions:

1. *Creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*
2. *Creation of 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;*
3. *Creation of hazardous emissions or handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;*



4. *Location on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, creation of a significant hazard to the public or the environment;*
5. *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, creation of a safety hazard for people residing or working in the project area;*
6. *For a project within the vicinity of a private airstrip, creation of a safety hazard for people residing or working in the project area;*
7. *Impairment of implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan; or*
8. *Exposure of 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 residences are intermixed with wildlands.*

The Initial Study (see Appendix A) determined that impacts related to the second, fourth, fifth, sixth, seventh, and eighth criteria were less than significant; therefore, the analysis focuses on the first, third, and fourth criteria.

City of Los Angeles CEQA Thresholds Guide

As set forth in the *City of Los Angeles CEQA Thresholds Guide*, the determination of significance shall be made on a case-by-case basis, considering the following factors:

- (a) *The regulatory framework (for the potential accidental release or explosion of a hazardous substance);*
- (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;*
- (c) *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;*
- (d) *The degree to which the project design will reduce the frequency or severity of a potential accidental release or explosion of a hazardous substance;*
- (e) *The regulatory framework for the health hazard;*
- (f) *The probable frequency and severity of consequences to people from exposure to the health hazards; or*
- (g) *The degree to which the project design would reduce the frequency or severity of consequences of exposure to the health hazard.*

Based on these factors, onsite development would have a significant impact if it would expose people or structures to substantial risk resulting from the release of a hazardous material, or from exposure to a health hazard, in excess of regulatory standards.



b. Project Impacts and Mitigation Measures.

Impact HAZ-1 Based on the age of the existing office building onsite, it is possible that asbestos is present in the structure. Development of the project site would require the demolition of a structure that could contain asbestos. Therefore, there is potential for the release of hazardous materials. However, compliance with applicable regulations regarding the handling and disposal of asbestos would reduce impacts to a *less than significant* level.

Construction on the project site would involve the demolition of the existing commercial office building on the project site, which, due to its age, may contain asbestos. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials (ACMs) are damaged or disturbed. When these fibers get into the air they may be inhaled into the lungs, where they can cause significant health problems (USEPA, 2008). Beginning in the late 1970s, asbestos was banned for building and construction purposes. If present in the existing structure, these ACMs would require abatement prior to demolishment or renovation of any existing buildings. If not properly abated in advance of demolishment or renovation, workers may be exposed to friable asbestos.

Existing regulations, including South Coast Air Quality Management District (SCAQMD) Rule 1403 (Asbestos Demolition and Renovation Activities), require that the owner or operator of any demolition or renovation activity have an asbestos survey performed prior to demolition. The ACM survey is required to be performed by a licensed asbestos sampling company. All testing procedures would follow California and Federal protocol. An asbestos survey report would quantify the areas of ACMs pursuant to California and Federal standards. If the onsite structure is found to contain ACMs, Rule 1403 requires that the ACMs must be removed according to proper abatement procedures. All abatement activities would need to be in compliance with California and Federal OSHA, and with SCAQMD requirements. Only asbestos trained and certified abatement personnel would be allowed to perform asbestos abatement. All ACMs removed from the onsite structure would be hauled to a licensed receiving facility and disposed under proper manifest, if needed, by a transportation company certified to handle asbestos containing materials. Following completion of the asbestos abatement, the asbestos consultant would provide a report documenting the abatement procedures used, the volume of ACM removed, where the material was moved and include transportation and disposal manifests or dump tickets. Each abatement report would be prepared for the property owner or other responsible party, with a copy submitted to the City of Los Angeles.

Adherence to SCAQMD Rule 1403 regarding the handling and disposal of asbestos would reduce impacts to a less than significant level. Nonetheless, the standard mitigation measure listed below is required.

Mitigation Measures.

Standard Measures. Onsite development would be required to comply with the following standard measure relating to the release of asbestos.



HAZ-1 Explosion/Release Asbestos Containing Materials. Due to the age of the building being demolished, asbestos-containing materials (ACM) may be located in the structure. Exposure to ACM during demolition could be hazardous to the health of the demolition workers as well as area residents and employees. Prior to the issuance of any demolition permit, the applicant shall provide a letter to the Department of Building and Safety from a qualified asbestos abatement consultant that no ACM are present in the building. If ACM are found to be present, it will need to be abated in compliance with the South Coast Air Quality Management District's Rule 1403 as well as all other State and Federal rules and regulations.

Significance After Mitigation. Implementation of standard Mitigation Measure HAZ-1 would reduce the risk of a potential release of asbestos to a less than significant level.

Impact HAZ-2 **Based on the age of the existing office building onsite, it is possible that lead-based paint is present. Development of the project site would require the demolition of a structure that could contain lead-based paints. There is the potential for a significant hazard to the public or the environment through the release of hazardous materials. However, proper evaluation and adherence with California and Federal OSHA requirements regarding the handling and disposal of this material would reduce impacts to a *less than significant* level.**

Construction on the project site would involve the demolition of the existing office building, which, due to its age, may contain lead-based paint. If not properly abated in advance of demolition or renovation, workers could be exposed to lead, which could adversely affect their health. However, prior to the issuance of a permit for the demolition of the onsite structure, the developer would be required to contract with a licensed lead-based paint consultant to evaluate the structure for lead-based paint. If present, the lead-based paint requires abatement prior to demolition or renovation of any existing building.

All abatement activities would be required to comply with California and Federal OSHA requirements. Only lead-based paint trained and certified abatement personnel would be allowed to perform abatement activities. All lead-based paint removed from these structures would be hauled and disposed by a transportation company licensed to transport this type of material. In addition, the material would be taken to a landfill or receiving facility licensed to accept the waste. Following completion of the lead based paint abatement, the lead based paint consultant would provide a report to the City of Los Angeles documenting the abatement procedures used, the volume of lead based paint materials removed, where the material was moved to, and include transportation and disposal manifests or dump tickets. With the required evaluation and abatement in accordance with California and Federal OSHA requirements, impacts related to lead-based paint would less than significant. Nonetheless, the following standard mitigation measure is required.



Mitigation Measures. Onsite development would be required to comply with the following standard measure related to the release of lead-based paint.

HAZ-2 Explosion/Release Lead-Based Paint Containing Materials. Prior to issuance of any permit for demolition or alteration of the existing structure(s), a lead-based paint survey shall be performed to the written satisfaction of the Department of Building and Safety. Should lead-based paint materials be identified, standard handling and disposal practices shall be implemented pursuant to OSHA regulations.

Significance After Mitigation. Implementation of the above standard mitigation measure would reduce the effects of the potential release of lead-based paint to a less than significant level.

Impact HAZ-3 Based on the Phase I Environmental Site Assessment, hazardous materials are not known to be present onsite. However, potential hazardous materials associated with the former industrial uses of the site may be present. Additional assessment of soils beneath the site is recommended at suspected potentially hazardous materials locations onsite. Impacts related to the potential release of hazardous materials that could affect people or the environment would be significant but mitigable.

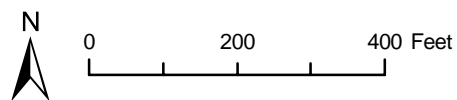
As described above in Section 4.5.1, *Setting*, a historic records search and site reconnaissance were performed to identify existing onsite environmental conditions. Historical records show the former industrial use of the site includes the presence of manufacturing facilities, railroad spurs, electrical transformer yard, auto repair shop, along with ASTs and USTs on portions of the site. As discussed in the Phase I prepared for the site (Appendix E), the former industrial use of the site, including the presence of former USTs, is a suspect environmental condition. Although numerous assessments have been conducted at the site, based on review of the Los Angeles Fire Department files, RWQCB files and documents provided by the City of Los Angeles, it was determined that some areas of the site were not assessed during the previous assessments. The six areas of the site not assessed in the documents reviewed are shown on Figure 4.5-1. The following is a description of each of the areas shown on Figure 4.5-1:

1. Former rail spurs on the northwestern corner of the site and within former Banning Street.
2. A former petroleum UST and oil ASTs located on the southwestern portion of the site (identified in the 1888 Sanborn map).
3. An auto repair facility located on the southern portion of the site (identified in the 1950-1954 Sanborn maps), north of the former onsite USTs.
4. An electrical transformer yard on the central-eastern portion of the site (identified in the 1953-1970 Sanborn maps).
5. The presence of a sheet metal shop and electrical products manufacturing facility on the northeastern portion of the site (identified in the 1953-1970 Sanborn maps), in the vicinity of the existing onsite structure.





Aerial source: Google Earth Pro, 2009.



Recommended Additional
Soil Assessment Site Locations

Figure 4.5-1
City of Los Angeles



6. The presence of an electrical products manufacturing facility on the northwestern corner of the site (identified in the 1964 and 1965 Sanborn maps), west of the existing onsite structure.

These areas have the potential to contain hazardous materials associated with the former industrial uses that could create a significant hazard to the public or the environment. Therefore, impacts would be potentially significant.

Mitigation Measures.

Standard Measures. The site developer would be required to comply with the following standard measure to ensure hazardous materials would not create a significant hazard to the public or environment.

- HAZ-3(a) Creation of a Health Hazard.** Environmental impacts to human health may result from development of the site due to a release of chemical or microbiological materials into the community. However, these impacts would be mitigated to a level of insignificance by the following measure:

- *The site developer shall submit for approval hazardous materials treatment and disposal plans to the decision maker and the Department of Public Works.*

Additional Measures. In addition to the above standard measure, the following measure is required to address the potentially significant impact of onsite development relating to the potential for onsite development to create significant hazards to the public or environment.

- HAZ-3(b) Additional Soil Assessment.** Additional soil assessment shall be conducted in the following locations (Figure 4.5-1 shows the location of each of the locations listed below):

1. *Former rail spurs on the northwestern corner of the site and within former Banning Street.*
2. *A former petroleum UST and oil ASTs located on the southwestern portion of the site (identified in the 1888 Sanborn map).*
3. *An auto repair facility located on the southern portion of the site (identified in the 1950 and 1954 Sanborn maps, north of the former onsite USTs).*
4. *An electrical transformer yard on the central-eastern portion of the site (identified in the 1953-1970 Sanborn maps).*
5. *A sheet metal shop and electrical products manufacturing facility on the northeastern portion of the site (identified in the 1953-1970 Sanborn maps), in the vicinity of the existing onsite structure.*
6. *An electrical products manufacturing facility on the northwestern corner of the site (identified in the 1964 and 1965 Sanborn maps), west of the existing onsite structure.*



If contaminants are detected, the results of the soil sampling shall be forwarded to the local regulatory agency (City of Los Angeles Fire Department, Los Angeles Regional Water Quality Control Board, or the State of California Environmental Protection Agency Department of Toxic Substances Control). The agency shall review the data and either sign off on the property or determine if any additional investigation or remedial activities are deemed necessary.

If concentrations of contaminants warrant site remediation, contaminated materials shall be remediated either prior to construction of structures or concurrent with construction. The contaminated materials shall be remediated under the supervision of an environmental consultant licensed to oversee such remediation. The remediation program shall also be approved by a regulatory oversight agency, such as the (City of Los Angeles Fire Department, Los Angeles Regional Water Quality Control Board, or the State of California Environmental Protection Agency Department of Toxic Substances Control). All proper waste handling and disposal procedures shall be followed. Upon completion of the remediation, the environmental consultant shall prepare a report summarizing the project, the remediation approach implemented, and the analytical results after completion of the remediation, including all waste disposal or treatment manifests.

If, during the soil sampling, groundwater contamination is suspected, or if soil contamination is detected at depths at or greater than 30 feet below grade, then the applicant shall perform a groundwater sampling assessment. If contaminants are detected in groundwater at levels that exceed maximum contaminant levels for those constituents in drinking water, or if the contaminants exceed health risk standards such as Preliminary Remediation Goals, one in one million cancer risk, or a health risk index above 1, then the results of the groundwater sampling shall be forwarded to the appropriate regulatory agency (City of Los Angeles Fire Department, Los Angeles Regional Water Quality Control Board, or the State of California Environmental Protection Agency Department of Toxic Substances Control). The agency shall review the data and sign off on the property or determine if any additional investigation or remedial activities are deemed necessary.

In addition, based on the previous industrial uses of the site, during redevelopment of the site, the grading contractor shall be made aware of the possibility of encountering contaminated soil. An environmental monitor shall be present during grading of the site to assist with identifying areas of contaminated soil (if any) and segregating these soils as appropriate.



Significance After Mitigation. Implementation of the above mitigation measures would reduce the potential risk for hazardous materials to affect the public or environment to a less than significant level.

Impact HAZ-4 The project site is located within an area identified as a City Methane Zone. As such, the project site could be affected by possible explosion or release of methane gas. Prior to development of the site, a soil gas test for methane concentrations is required to determine if methane exists onsite. If methane is determined to exist onsite, standard City mitigation measures and compliance with the City's Municipal Code would reduce the risk associated with the possible explosion or release of methane gas to *less than significant*.

The project site is located within an identified City Methane Zone (ZIMAS, 2009). Methane gas naturally occurs in areas of subterranean petroleum deposits, such as oil fields. Subsurface concentrations of methane gas can result in seepage of the gas to the surface and into buildings through basements. Methane gas is non-toxic, odorless, colorless, and highly flammable at certain concentrations. At high concentrations, methane can act as an asphyxiant. Sites located within Methane Zones have the potential to be affected by the release or explosion of methane gas. Prior to development of the site, a soil gas test for methane gas concentrations would be required to determine whether methane exists at the project site pursuant to Municipal Code Section 91.7103. If methane is determined to exist at the project site, compliance with the Los Angeles Methane Seepage Regulations is required for buildings and paved areas located in either a Methane Zone or Methane Buffer Zone. Impacts would be less than significant with completion of a soil gas survey to be utilized in completing a methane mitigation plan for the project site along with the standard City mitigation measure below.

Mitigation Measures.

Standard Measures. If methane is determined to exist at the project site following the soil gas test for methane, onsite development would be required to comply with the following standard measure to ensure development within City Methane Gas Zone would not create a significant hazard to the public or environment.

HAZ-4(a) Explosion/Release Methane Gas. Environmental impacts may result from development of the site due to its location in an area of potential methane gas zone. However, this potential impact would be mitigated to a level of insignificance by the following measures:

- *All commercial, industrial, and institutional buildings shall be provided with an approved Methane Control System, which shall include these minimum requirements; a vent system and gas-detection system which shall be installed in the basements or the lowest floor level on grade, and within underfloor space of buildings with raised foundations. The gas-detection system shall be designed to automatically activate the vent system when an action level equal to*



25% of the Lower Explosive Limit (LEL) methane concentration is detected within those areas.

- *All commercial, industrial, institutional and multiple residential buildings covering over 50,000 square feet of lot area or with more than one level of basement shall be independently analyzed by a qualified engineer, as defined in Section 91.7102 of the Municipal Code, hired by the building owner. The engineer shall investigate and recommend mitigation measures which will prevent or retard potential methane gas seepage into the building. In addition to the other items listed in this section, the owner shall implement the engineer's design recommendations subject to Department of Building and Safety and Fire Department approval.*
- *All multiple residential buildings shall have adequate ventilation as defined in Section 91.7102 of the Municipal Code and a gas-detection system installed in the basement or on the lowest floor level on grade, and within the underfloor space in buildings with raised foundations.*

Additional Measures. In addition to the above standard measure, the following measure is required to determine whether methane exists on the project site.

HAZ-4(b) Site Testing. Prior to the issuance of a building permit, applicant shall comply with the City Methane Seepage Regulations as outlined in Municipal Code Section 91.7103. Site testing of subsurface geological formations shall be conducted in accordance with the Methane Mitigation Standards. The site testing shall be conducted under the supervision of a licensed architect or registered engineer or geologist and shall be performed by a testing agency approved by the Department of Building and Safety.

The licensed architect, registered engineer or geologist shall indicate in a report to the Department of Building and Safety, the testing procedure, the testing instruments used to measure the concentration and pressure of the methane gas. The measurements of the concentration and pressure of the methane gas shall be used to determine the Design Methane Concentration and the Design Methane Pressure which will be used determine the Site Design Level as stated in Table 4.5-1.

Significance After Mitigation. If methane concentrations are discovered at the project site through the soil gas test, implementation of the above standard City mitigation measure along with compliance with Municipal Code 91.7103 would reduce the potential risk for the release or explosion of methane to affect the public or environment to a less than significant level.

c. Cumulative Impacts. Cumulative development in Los Angeles will have the potential to expose future area residents, employees, and visitors to chemical hazards by developing and redeveloping areas that may have previously been contaminated. In general, onsite development combined with other pending projects in site vicinity (see Table 3-1 in



Section 3.0, *Environmental Setting*) would contribute toward creating a more intensely developed urban environment by adding more than 17,000 new residences as well as more than five million square feet of non-residential development. The magnitude of hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Therefore, hazard evaluations would need to be completed on a case-by-case basis. If lead and asbestos are found to be present in buildings planned for demolition or renovation, or in the case that soil and groundwater contamination were found to be present on sites of planned and future development, these conditions would require appropriate mitigation and compliance with existing applicable local, state and federal regulations. If a project site is located within a City Methane Zone, soil testing for methane concentrations pursuant to Municipal Code Section 91.7103 would be required prior to site development. If methane concentrations were discovered on the site, then standard City mitigation measures addressing explosion or release of methane would be required for implementation. Compliance with applicable regulations and implementation of appropriate mitigation measures, including remedial action on contaminated sites, would avoid potential cumulatively significant hazards and hazardous materials impacts associated with cumulative development in the City.



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