IV. Environmental Impact Analysis J. Hazards and Hazardous Materials

1. Introduction

This section of the Draft EIR analyzes the Project's potential impacts with regard to hazards and hazardous materials. The analysis is based on the *Phase I Environmental Site Assessment* (Phase I ESA) prepared for the Project Site by ATC Associates, Inc. (June 7, 2011) included as Appendix H-1 of this Draft EIR and the *Technical Memorandum: Hazards and Hazardous Materials* (referred to in Section IV.J as the "Technical Memorandum") prepared by Geosyntec Consultants (November 15, 2013) included as Appendix H-2 of this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

The regulations governing the storage and handling of hazardous materials are complex, with a varying degree of overlap associated with existing federal, State, and local programs. In general, applicable laws and regulations are aimed at hazardous materials inventory and emergency response planning, risk planning and accident prevention, employee hazard communication, public notification of potential exposure to specific chemicals, storage of hazardous materials (including aboveground storage tanks (AST)), and underground storage tanks (UST). A description of the major policies and programs regulating hazardous materials storage and handling applicable to activities at the Project Site is provided below.

(1) Hazardous Materials Use, Storage, and Management

(a) Emergency Response and Community Right-to-Know Act (Superfund Amendments and Reauthorization Act, Title III)

In 1986, Congress adopted the Emergency Planning and Community Right-to-Know Act (42 United States Code Sections 11001–11050) as Title III of the federal Superfund Amendments and Reauthorization Act. The federal Emergency Planning and Community Right-to-Know Act establishes reporting and planning requirements for businesses that handle or store specified hazardous materials. These reports and plans provide federal,

State, and local emergency planning and response agencies with information about the amounts of materials that businesses use, release, and/or spill. They also provide the public with information about potential hazards in their communities.

In California, many of the requirements of the Emergency Planning and Community Right-to-Know Act overlap with regulations adopted under the State's Waters Bill and La Follette Bill, which are discussed below. The Emergency Planning and Community Right-to-Know Act consists of four separate programs, including:

- Planning for emergency response (Sections 301 to 303), which is also addressed by the provisions of the La Follette Bill and the Waters Bill;
- Reporting leaks and spills (Section 304), also covered by the Waters Bill;
- Reporting hazardous materials inventories (Sections 311 and 312), which is also required by the Waters Bill; and
- Annual reporting of total releases of specified "toxic chemicals" (Section 313).

(b) Waters Bill

Businesses in California that handle hazardous materials are required to comply with California's Hazardous Materials Release Response Plans and Inventory Law (Assembly Bill 2185; Health & Safety Code Section 25500 *et seq.*), also known as the Waters Bill. Basic requirements of hazardous materials planning under the Waters Bill include the development of detailed inventories of the hazardous materials used and stored on-site, a program of employee training for hazardous materials release response, and the identification of emergency contacts and response procedures. The reporting thresholds in the Waters Bill for hazardous materials are:

- 55 gallons of a liquid;
- 500 pounds of a solid;
- 200 cubic feet of a compressed gas measured at standard temperature and pressure; and
- For radioactives, the quantity for which an emergency plan is required under federal or state regulations.

Any facility that meets the minimum threshold for any of the categories listed above must comply with the reporting requirements and file a business emergency plan with the local administering agency. A business emergency plan must include a complete inventory of all hazardous materials used and stored at a site in quantities above the associated thresholds and a program of employee training for hazardous materials releases. For the Project Site the local administering agency is the City of Pasadena Fire Department (PFD).

(c) Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Senate Bill 1082 (1994) established the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program consolidates and coordinates the State programs that regulate business and industry's use, storage, handling, and disposal of hazardous materials and hazardous wastes. As a Unified Program Agency, the PFD oversees tank monitoring, installation, removal, and site mitigation. The federal government and the State require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials to submit a business plan to their local Certified Unified Program Agency. The PFD requires preparation, submittal and implementation of a business plan on a yearly basis if a business uses, stores, or manufactures a hazardous material in any amount. The business plan includes an inventory of the hazardous materials and sets forth emergency response plans and procedures to be used in the event of a significant, or threatened significant, release of a hazardous substance.

(d) La Follette Bill

The La Follette Bill (Assembly Bill 3777; Health & Safety Code Sections 25531 et seq.) requires risk planning and accident prevention provisions for facilities that use or store Acutely Hazardous Materials. Acutely Hazardous Materials (known as Extremely Hazardous Substances under the Emergency Planning and Community Right-to-Know Act) are defined as any chemical designated as an extremely hazardous substance in the Code of Federal Regulations, Title 40, Part 355 (40 Code of Federal Regulations 355), Appendix A. Under the La Follette Bill, facilities that store or utilize certain types and quantities of hazardous materials may be required to develop Risk Management Plans. Risk Management Plans include management, engineering and safety studies, as well as the construction of physical improvements, if warranted, designed to minimize the potential for hazardous materials accidents and, if an accident does occur, to minimize the impacts Risk Management Plans are process-specific rather than projectof such an event. specific. As such, they focus on the use of hazardous materials in various operations. For processes that use quantities of hazardous materials at or above the thresholds defined by the La Follette Bill, a Risk Management Plan must be prepared. Quantity thresholds as defined under the bill vary for different hazardous constituents. The La Follette Bill requires that Risk Management Plans be updated every three years for continuing operations or

whenever the process changes to the extent that the current Risk Management Plan does not reflect the revised process.

The State Office of Emergency Services has delegated authority to local agencies to administer the Waters and La Follette Bills. In the City of Pasadena, PFD issues permits for hazardous materials handling (in accordance with the La Follette Bill), enforces Assembly Bill 2185 (per the Waters Bill), and administers the applicable sections of the California Fire Code, including Division 8 (Hazardous Materials Release Response Plans and Inventory Statements). Because the administering agency is the PFD, Risk Management Plans are required to be filed with the PFD. The PFD administers the requirements of these bills through a combination of the following:

- Fire Department inspections;
- Plan checks;
- Disclosure requirements associated with a business emergency plan; and
- Requirements for the preparation and filing of Risk Management Plans.

Any business handling hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) is required to obtain a local fire department permit, in this case from the PFD, and register the business as a hazardous materials handler.

(e) Federal and California Occupational Safety and Health Acts

Federal occupational safety and health regulations also contain provisions with respect to hazardous materials management. The applicable federal law is the Occupational Safety and Health Act of 1970, as amended, which is implemented by the Occupational Safety and Health Administration (29 United States Code, Sections 651–678). Federal Occupational Safety and Health Act requirements, set forth in 29 Code of Federal Regulations Section 1910 *et seq.*, are designed to promote worker safety, worker training, and a worker's right-to-know. A major component of the federal regulations is the requirement that employers implement the Occupational Safety and Health Act Hazard Communication Standard to provide information to employees about the existence and potential risks of exposures to hazardous substances in the workplace. As part of the Hazard Communication Standard, employers must:

• Obtain material safety data sheets from chemical manufacturers which identify the types and handling requirements of hazardous materials used in given areas;

- Make the material safety data sheets available to their employees;
- Label chemical containers in the workplace;
- Develop and maintain a written hazard communication program; and
- Develop and implement programs to train employees about hazardous materials.

Employers are also required to train a team of employees to appropriate federal Occupational Safety and Health Act-defined levels, to respond to accidental releases of hazardous materials, and, as appropriate, to retain on-call contractors to perform hazardous materials accidental release responses (29 Code of Federal Regulations 1910.120, Hazardous Waste Operations and Emergency Response Standards).

Since the State of California has a State plan with provisions at least as stringent as those required by the Occupational Safety and Health Act, the United States Department of Labor has delegated the authority to administer the Occupational Safety and Health Act regulations to the State of California. The California Occupational Safety and Health Act program (codified in the California Code of Regulations, Title 8, and Labor Code Sections 6300–6719) is administered and enforced by the Division of Occupational Safety and Health, a unit of California's Department of Industrial Relations.

The California Occupational Safety and Health Act is similar to the federal program. In addition to the provisions identified above, the California Occupational Safety and Health Act requires employers to implement a comprehensive, written Injury and Illness Prevention Program. An Injury and Illness Prevention Program is an employee safety program that covers the full range of potential workplace hazards, including those associated with hazardous materials.

(f) Safe Drinking Water and Toxic Enforcement Act

The Safe Drinking Water and Toxic Enforcement Act (22 California Code of Regulations Section 12000 *et seq.*), also known as Proposition 65, was developed to improve public health by reducing the incidence of cancer and adverse reproductive outcomes that might result from exposure to potentially hazardous chemicals. Proposition 65 requires the following:

 The creation of a list of chemicals and substances, and the levels at which they are believed to have the potential to cause cancer or deleterious reproductive effects in humans;

- Restriction of discharges of listed chemicals into known drinking water sources at levels above the regulatory levels of concern;
- Public notification of any unauthorized discharge of hazardous waste;
- A clear and understandable warning given prior to a known and intentional exposure to a listed substance; and
- Establishment of a right of action for private citizens and a separate set of notice requirements for "designated government employees" and counties.

Though Proposition 65 is enforced by the County of Los Angeles Health Officer, the law can also be enforced by state or local government prosecutors (i.e., State Attorney General, County District Attorney, and City Attorney).

(g) Pasadena General Plan Safety Element

The City's General Plan Safety Element, which was adopted in 2002, addresses public safety risks due to hazardous materials, such as: air pollutants, contaminants in drinking water, and leaking USTs. The ultimate objective of the Safety Element is to improve the safety of the community, from the risks listed above, and in that process make the City more sustainable and prosperous. The Safety Element provides goals, policies, and programs aimed at reducing the City's risk from these hazards as well as a map of the distribution of hazardous materials sites within the City. Goals are statements that describe the City's purpose and direction in reducing its hazards. Policies are guidelines that can be implemented to reduce the City's risk and maximize the community's emergency preparedness. Programs are the specific actions that the City has committed to implement over a given number of years to reduce its hazards.

Additionally, PFD monitors the storage of hazardous materials in the City for compliance with local requirements. Specifically, businesses and facilities which store more than the 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 PFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations.

(2) Hazardous Waste Generation, Handling, and Disposal

(a) Federal Resource Conservation and Recovery Act and California Hazardous Waste Control Law

The federal Resource Conservation and Recovery Act (42 United States Code Sections 6901–6992k) regulates the generation, transportation (through standards applicable to transporters of hazardous waste), treatment, storage, and disposal of hazardous waste. Under the Resource Conservation and Recovery Act (RCRA) regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. The RCRA program also establishes standards for hazardous waste treatment, storage, and disposal units, which are intended to have hazardous wastes managed in a manner that minimizes present and future threats to the environment and human health. 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 of at a facility, any treatment, storage, or disposal unit must be permitted under RCRA.

RCRA classifies users that generate greater than 1,000 kilograms (approximately 2,205 pounds) per month of non-acutely hazardous waste as "large quantity generators." Large-quantity generators are subject to the life cycle hazardous waste management requirements of RCRA. RCRA requires large quantity generators to maintain inspection logs of hazardous storage locations, records of the quantity of hazardous waste being generated and stored on-site, manifests of pick-ups of these wastes from the site by hazardous licensed waste transporters, and records from the licensed treatment/storage/disposal facilities which receive and ultimately treat or dispose of the waste.

RCRA allows individual states to develop their own programs for the regulation of hazardous waste as long as they are at least as stringent as the federal act. The State of California has developed the California Hazardous Waste Control Law (Health and Safety Code Section 25100 *et seq.*; 22 California Code of Regulations Section 66260.1 *et seq.*), which is modeled closely after RCRA. Unlike RCRA, the Hazardous Waste Control Law does not recognize a threshold below which generators are exempt from some or all of the Hazardous Waste Control Law requirements.

The United States Environmental Protection Agency has delegated RCRA enforcement to the State of California. Primary authority for the statewide administration and enforcement of the Hazardous Waste Control Law rests with the California Environmental Protection Agency's Department of Toxic Substances Control. The Department of Toxic Substances Control has delegated to local agencies the authority to inspect and regulate hazardous waste generators. As previously indicated, PFD is a

Unified Program Agency under the Unified Program. The Unified Program consolidates and coordinates the six state programs that regulate business and industry's use, storage, handling, and disposal of hazardous materials and hazardous wastes.

Both RCRA and the Hazardous Waste Control Law require businesses to prepare biennial hazardous waste reports that identify the nature and quantity of each type of hazardous waste generated and the treatment, disposal method, and facilities used for each waste (40 Code of Federal Regulations 262.41(a) and 22 California Code of Regulations 66262.41). These reports must be submitted to the California Department of Toxic Substances Control.

(b) Federal Occupational Safety and Health Act and California Occupational Safety and Health Act

The federal Occupational Safety and Health Act and California Occupational Safety and Health Act regulations also contain worker safety provisions with respect to routine hazardous waste management operations and emergency responses involving hazardous wastes. The provisions are included in the Hazardous Waste Operations and Emergency Response Standard (29 United States Code sec 651 *et seq.*; 29 Code of Federal Regulations 1910.120; 40 Code of Federal Regulations 311), which requires a written health and safety program, worker training, emergency response training, medical surveillance, and measures to reduce worker exposure to hazardous waste.

(3) Asbestos

(a) Toxic Substances Control Act

In 1976, the federal Toxic Substances Control Act (15 United States Code Sections 2601–2671) established a system of evaluation in order to identify chemicals which may pose hazards. The Toxic Substances Control Act also established a process by which public exposure to hazards may be reduced through manufacturing, distribution, use and disposal restrictions or labeling of products. Under the Toxic Substances Control Act (40 Code of Federal Regulations 763), the United States Environmental Protection Agency has enacted strict requirements on the use, handling, and disposal of asbestos-containing materials. These regulations include the phasing out of friable asbestos and asbestos-containing materials in new construction materials beginning in 1979 (40 Code of Federal Regulations 763). Friable asbestos may be found in pre-1979 construction. In addition, due to potential adverse health effects in exposed persons, in 1989 the United States Environmental Protection Agency banned most uses of asbestos in the country. Although most of the ban was overturned in 1991, the current banned product categories include corrugated paper, rollboard, commercial paper, specialty paper, flooring felt, and any new uses. The Toxic Substances Control Act is enforced by the United States Environmental

Protection Agency through inspections of places in which asbestos-containing materials are manufactured, processed, and stored and through the assessment of administrative and civil penalties and fines, as well as injunctions against violators.

(b) Federal and California Occupational Safety and Health Acts

The federal and State Occupational Safety and Health Acts regulate asbestos as it relates to employee safety through a set of general notification requirements and corrective actions to reduce potential exposure levels. The federal Occupational Safety and Health Act Worker Exposure Rule for Asbestos (29 Code of Federal Regulations 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 fiber per cubic centimeter of air, averaged over an 8-hour day). These actions include:

- Corrective measures to reduce exposure levels;
- Notification, including warning signs and labels;
- Controlled access;
- Use of protective equipment;
- Implementation of engineering and housekeeping controls; and
- Employee training programs.

The Occupational Safety and Health Act has established an action level for workplace exposure as well. If an employee could be exposed above the action level, employers must begin compliance activities such as notification, employee training, air monitoring and, in some cases, medical surveillance. In buildings that contain asbestos-containing materials, levels of airborne asbestos are not expected to reach Occupational Safety and Health Act exposure standards. Nonetheless, the Environmental Protection Agency recommends that building owners inform building occupants of the presence and location of asbestos-containing materials, even if potential exposure is below the levels identified above. In addition to these regulations, contractors involved in asbestos surveys and removal are required to be certified by the Division of Occupational Safety and Health.

(c) Connelly Act

The Connelly Act (Assembly Bill 3713; Health and Safety Code Section 25915 *et seq.*) establishes notification requirements for all owners and employees working within any pre-1979 building known to contain asbestos-containing materials. Notification could be based upon a survey of asbestos-containing materials and their locations. The notification

requirements of the Connelly Act are enforced by the California Division of Occupational Safety and Health.

(d) National Emission Standards for Hazardous Air Pollutants

The United States Environmental Protection Agency has established National Emission Standards for Hazardous Air Pollutants (40 Code of Federal Regulations 61 Part M) that govern the use, removal, and disposal of asbestos-containing materials as a hazardous air pollutant. The National Emission Standards for Hazardous Air Pollutants regulations concern the manufacture, spraying, and fabricating of asbestos-containing materials, as well as its application, removal, and disposal. The National Emission Standards for Hazardous Air Pollutants regulations mandate the removal of friable asbestos-containing materials before a building is demolished and include notification requirements prior to demolition. The regulations also mandate removal techniques, limit visible emissions of dust to the outside air during removal or renovation, specify disposal procedures, and include provisions governing the packaging and labeling of asbestos wastes. The National Emission Standards for Hazardous Air Pollutants regulations are promulgated and enforced by the United States Environmental Protection Agency. 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. The South Coast Air Quality Management District implements the National Emission Standards for Hazardous Air Pollutants through its Rule 1403, discussed below.

(e) South Coast Air Quality Management District Rule 1403

South Coast Air Quality Management District Rule 1403, Asbestos Emissions from Renovation/Demolition Activities, 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 structures with asbestos-containing materials, asbestos storage facilities, and waste disposal sites. The requirements under this rule include the following:

- Surveying structures for asbestos-containing materials;
- Agency notification of intention to remove asbestos;
- Asbestos-containing materials removal procedures and time schedules;
- Asbestos-containing materials handling and clean up procedures;
- Asbestos-containing materials storage, disposal and landfill requirements; and

- Record keeping.
 - (4) Lead-Based Paint
 - (a) Residential Lead-Based Paint Reduction Act, Title X

Lead exposure is regulated at the federal and State levels and by various agencies. The United States Environmental Protection Agency has been mandated to protect building occupants from the hazards associated with lead-based paint as described in Title X, the Residential Lead-Based Paint Reduction Act of 1992 (of the Housing and Community Development Act of 1992). Title X amends the Toxic Substances Control Act, Title IV (Lead Exposure Reduction) and contains all the United States Environmental Protection Agency mandates for targeting housing owner and occupant notification and the regulation of lead-based paint activities occurring in targeted housing. Under Section 402(a)(1) of the Toxic Substances Control Act, the United States Environmental Protection Agency is also developing new disposal standards for lead-based paint wastes.

At present, RCRA and State regulations generally apply to the disposal of lead but not specifically lead-based paint.

(b) Federal and California Occupational Safety and Health Acts

Federal Occupational Safety and Health Act requirements, set forth in 29 Code of Federal Regulations Section 1910 et seq., are designed to promote worker safety, worker training, and a worker's right-to-know. Requirements include: General Industry Respiratory Protection Standard (29 Code of Federal Regulations 1910.134) for the use of respiratory protection devices intended to control occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors; the Lead in General Industry Standard (29 Code of Federal Regulations 1910.1025), which is applicable to all occupational exposures to lead, except for lead exposures in the construction industry, to protect employees from significant lead exposures and to educate the employees on health hazards associated with lead; and, the General Industry Hazard Communication Standard (29 Code of Federal Regulations 1910.1200), which is the Occupational Safety and Health Act's general industry hazard communication standard and applies to all employees exposed to chemical and physical hazards in the general industry sector. The Occupational Safety and Health Act requirements set forth in 29 Code of Federal Regulations Section 1926 et seq., are designed to promote safety during construction. These requirements include standards to comprehensively address the issue of evaluating and communicating chemical and physical hazards to employees in the construction sector (the Construction Industry Hazard Communication Standard [29 Code of Federal Regulations 1926.59]), for the demolition, salvage, removal, alternation, etc. of lead-containing materials and lead contamination/emergency clean up, transportation,

disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed, including maintenance activities associated with construction activities (the Lead in Construction Standard [29 Code of Federal Regulations 1926.62]). As with 29 Code of Federal Regulations 1910.134, the Respiratory Protection in Construction Standard (29 Code of Federal Regulations 1926.103) is applicable to all employees who are required or choose to wear respiratory protection devices. The intent of the standard is to control occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. This standard requires the establishment of a written respiratory protection program whenever employees are required or choose to wear respiratory.

Title 8 of the California Code of Regulations, Section 1532.1 (8 California Code of Regulations 1532.1) is a rule developed by the federal Occupational Safety and Health Administration in 1993 and adopted by the State of California. This rule is comparable to the federal standards described above. While this regulation has been updated several times since 1993, one important difference between it and the federal standard is the additional requirement to notify the Division of Occupational Safety and Health in writing before abating 100 square feet or more of lead-based paint. Title 17 of the California Code of Regulations, Division 1, Chapter 8 requires that all consultants and contractors conducting activities involving lead-based paint or lead hazards be certified. This regulation also defines lead-based paint, lead hazards, and lead clearance criteria. This regulation requires that the California Department of Health Services be notified in writing before all hazard-related testing and hazard mitigation-related abatement activities occur.

(c) Safe Drinking Water and Toxic Enforcement Act

The Safe Drinking Water and Toxic Enforcement Act (Title 22, Division 2, Chapter 3, Sections 12000 through 14000), enacted as Proposition 65, lists lead as a substance known to the State of California to be a reproductive toxin and prohibits a business from knowingly exposing anyone to levels in excess of the "No Significant Risk Level" without first giving "clear and reasonable warning." The No Significant Risk Level is set at five micrograms of lead per day. In addition to providing warning requirements, these codes prohibit discharge to land or water where lead can pass into a source of drinking water.

(5) Polychlorinated Biphenyls (PCBs)

(a) Toxic Substances Control Act

Due to their hazardous properties, all aspects of polychlorinated biphenyls are strictly regulated by the United States Environmental Protection Agency under the Toxic Substances Control Act. These regulations ban the manufacture of polychlorinated biphenyls although the continued use of existing polychlorinated biphenyl-containing equipment is allowed. Transformer oil containing polychlorinated biphenyls at a concentration exceeding five parts per million is the California-regulated concentration for hazardous waste though polychlorinated biphenyls in transformer oil at a concentration up to 50 parts per million are currently allowed in transformers in California. The Toxic Substances Control Act also contains provisions controlling the continued use and disposal of existing polychlorinated biphenyls-containing equipment.

The disposal of polychlorinated biphenyls is also regulated by federal and State laws. The disposal of polychlorinated biphenyls wastes is regulated by the Toxic Substances Control Act (40 Code of Federal Regulations 761), which contains life cycle provisions similar to those in RCRA.

(b) California Hazardous Waste Control Law

In addition to the Toxic Substances Control Act, provisions relating to polychlorinated biphenyls are contained in the Hazardous Waste Control Law, previously discussed, which lists polychlorinated biphenyls as hazardous waste.

(6) Emergency Response

The City of Pasadena maintains a citywide emergency response plan which goes into effect at the onset of a major disaster (e.g., earthquake). The Emergency Management Coordinator maintains the disaster plan and the Director of Emergency Services (City Manager) and the Emergency Operations Center are responsible for implementing the plan in case of a disaster. The Pasadena Police Department devises evacuation routes based on the specific circumstance of an emergency. Although the Project Site is not in an inundation area, the City of Pasadena has pre-planned evacuation routes, including those set forth in the Devil's Gate Dam Evacuation Plan, Eaton Wash Evacuation Plan, and the Jones Reservoir Evacuation Plan.

(7) Fire Hazards

(a) California Fire Code

The California Fire Code is contained within Part 9 of Title 24, California Building Standards Code, of the California Code of Regulations. Fire safety requirements outlined in the California Fire Code include the installation of fire sprinklers in all high-rise buildings, the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas, and the establishment of fire resistance standards for

fire doors, building materials, and particular types of construction. The City of Pasadena adopted the California Fire Code with specific amendments.¹

b. Existing Conditions

(1) Historical Uses of the Project Site

The historical and current land uses within the Project Site were identified to assess their potential to present concerns relative to the presence of hazards and/or the handling of hazardous materials. The Project Site is listed in both the Historical Auto Stations and Historical Cleaners databases, because past uses of the Project Site include a former gasoline station located on the north-central portion of the Project Site (historical addresses of 88 West Walnut Street and 199 North De Lacy Avenue) and former dry cleaners (historical addresses of 127, 137, 151, 167, 171, and 187 North Fair Oaks Avenue). While these businesses used hazardous materials at the Project Site, there is no evidence indicating subsurface impacts have occurred from these potential sources. Even though no evidence of subsurface impacts exists, these historical uses are conservatively classified as recognized environmental conditions (RECs), which are defined in Section 1.1.1 of the American Society of Testing and Materials (ASTM) Standard Practice as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or 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.

(2) Hazardous Materials Use and Storage

The North Development Area is currently developed with a 12-story office building and three 4-story pods and associated parking. Currently, operations within the Project Site involve the use of limited quantities of potentially hazardous materials typical of those used for office and parking uses. These materials include janitorial supplies and maintenance materials such as paints, water treatment chemicals, ink, aerosol cans, etc. stored inside the buildings. In addition, an emergency generator is located in an exterior enclosure along the western boundary of the Project Site. Diesel fuel for this generator is stored in a double-walled, 240-gallon, AST within the enclosure, as discussed below.

¹ City of Pasadena Planning and Community Development Department, www.ci.pasadena.ca.us/ PermitCenter/Codes_and_Regulations/, accessed January 24, 2014.

(3) Hazardous Waste Generation, Handling, and Disposal

As described above, small amounts of chemicals for office, parking, landscaping purposes and maintenance are currently used within the Project Site. The hazardous wastes associated with the use of these chemicals currently generated on-site are taken from the Project Site by a licensed contractor to be managed at licensed waste treatment, disposal, or recycling facilities that are permitted to receive the applicable waste.

(4) Underground and Aboveground Storage Tanks

The Project Site contains an emergency generator located in an exterior enclosure along the western boundary of the Project Site. Diesel fuel for the generator is stored in a double-walled, 240-gallon, AST within the enclosure. No signs of stains or vegetative stress suggestive of a release of hazardous substances have been observed in the area of the AST. In addition, according to the Phase I ESA, there is no visual or documentary evidence of current or former USTs located on the Project Site.

(5) Asbestos Containing Materials and Lead-Based Paint

There are a few locations inside the buildings within the Project Site where asbestos-containing materials (ACMs) were observed. In addition, based on the age of the buildings (circa 1974), it is possible that lead-based paint (LBP) was used at the Project Site.

(6) Polychlorinated Biphenyls

Electrical transformers were not observed on the exterior portions of the Project Site. However, a transformer room is located on the southern side of the southern pod. The transformers have the potential to contain polychlorinated biphenyls (PCBs). As the transformers were reportedly replaced in 2005, it is unlikely that they would contain PCBs. Another potential source of PCBs are the ballasts of the fluorescent lights that are present throughout the Project Site. In addition, PCBs have been used as an additive in hydraulic fluid. However, the elevators at the Project Site are cable operated and are not operated by a hydraulic system. Furthermore, no chemicals or stains were observed in the elevator service room.

(7) Hazardous Materials Database Search

The Phase I ESA also included a review of regulatory agency databases to identify if any reported releases of hazardous substances and petroleum products have occurred on or near the Project Site. As discussed in the Phase I ESA, the Project Site was listed on the RCRA Small-Quantity Generator database, but no violations were reported. The presence of the Project Site on the RCRA Small-Quantity Generator database is an indication that some hazardous waste is generated at the Project Site. As long as the hazardous waste is handled, stored, transported, and disposed properly, the presence of the Project Site on the RCRA Small-Quantity Generator database does not represent a concern at the Project Site. In addition, as discussed above, the Project Site is listed in the Historical Auto Stations and Historical Cleaners databases. As discussed above, even though there is a lack of evidence indicating subsurface impacts have occurred from these potential sources, these historical uses are conservatively considered RECs. Although historical on-site uses are classified as RECs, the Project Site is not listed in any of the pertinent tables of the Pasadena General Plan Safety Element Technical Background Report.

(8) Fire Hazards

The Project Site is not located within a Very High or Moderate Fire Hazard Zone, as established by the City of Pasadena.² In addition, the Project Site is located within a densely developed urban area with no large areas of forests, grasslands, or dense native vegetation. All trees within the Project Site are regularly pruned and maintained.

(9) Past and Current Use of Adjacent Properties

Nearby properties, predominantly commercial and office uses, are listed in databases such as: RCRA Large-Quantity Generator; registered UST facility; Historical UST; Statewide Environmental Evaluation and Planning Systems list; Historical Auto Stations; leaking UST; and Historical Cleaners. However, based on the distance from the Project Site, topography, the location of the adjacent properties with respect to the groundwater gradient, the regulatory status of these listings, and the absence of reported impacts, impacted media, etc., the adjacent properties do not present a risk in terms of the presence of potential hazardous materials.³

(10) Other Site Conditions

According to a Southern California Gas Company Gas Transmission Map, a natural gas transmission pipeline runs along the west and northwest boundary of the Project Site.

² City of Pasadena, General Plan Safety Element, Plate P-2, Summary of Hazards Map (II), June 2002.

³ ATC Associates, Inc.; Phase I Environmental Site Assessment of Office Buildings, 100 West Walnut Street, Pasadena, California, 91103; June 7, 2011.

3. Environmental Impacts

a. Methodology

To evaluate potential impacts relative to hazards and hazardous materials, a Phase I ESA and a Technical Memorandum were prepared for the Project Site. The Phase I ESA is included as Appendix H-1 of this Draft EIR and the Technical Memorandum included as Appendix H-2 of this Draft EIR.

b. Thresholds of Significance

The proposed Project may have a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 ("CORTESE List") and as a result, would 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, the project results in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, the project results 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; or
- Exposes 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.

As evaluated in the Initial Study included as Appendix A-2 of this Draft EIR and discussed above, the Project Site is not located within 2 miles of an airport, private airstrip, or within an airport planning area. In addition, the Project Site is not located within a Very High or Moderate Fire Hazard Zone, as established by the City of Pasadena. Therefore, no impact with respect to these issues would occur and no further analysis of these issues is provided below.

c. Regulatory Compliance Measures and Project Design Features

- (1) Regulatory Compliance Measures
- **Regulatory Compliance Measure J-1:** All hazardous materials on the Project Site must be acquired, handled, used, stored, and disposed of in accordance with all applicable federal, State, and local requirements.
- **Regulatory Compliance Measure J-2:** Because of the potential to encounter impacted soil, the contractors conducting the construction work are required to operate in accordance with the most current OSHA regulations, including 29 CFR 1910.120, *Hazardous Waste Operations and Emergency Response* and 29 CFR 1926, *Construction Industry Standards* as well as other applicable federal, State, and local laws and regulations.
- **Regulatory Compliance Measure J-3:** The construction contractor is required to develop a Hazardous Materials Business Plan subject to the review and approval by the Pasadena Fire Department Hazardous Materials Section, which would serve as a Spill Prevention and Control Plan. The Hazardous Materials Business Plan is required to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction activities in accordance with California Health and Safety Code, Division 20, Chapter 6.95. The plan and methods are required to be in conformance with applicable local, state, and federal regulations. If a business emergency plan is developed for the construction site, the plan must serve as the Spill Prevention and Control Plan. Additionally, all equipment and materials identified in the Spill Prevention and Control Plan to contain and control a spill are required to be maintained and replenished on the Project Site during the duration of construction.
- Regulatory Compliance Measure J-4: In accordance with applicable federal, State, and local regulations, the design, construction and maintenance of new development associated with the Project must not include features that would use or expose persons to polychlorinated biphenyls.

- **Regulatory Compliance Measure J-5:** The delineation of underground utilities is required to be conducted prior to construction in accordance with applicable law and standard industry practices in order to confirm the location of subsurface pipelines on the Project Site. This must include notifying Underground Service Alert.
- **Regulatory Compliance Measure J-6:** The permit for the proposed temporary storage tank must be obtained in compliance with Sections 105.6.16 and 105.7.7 of the California Fire Code.

(2) Project Design Features

No specific project design features are proposed with regard to hazards and hazardous materials.

d. Analysis of Project Impacts

Construction of the Project would be implemented in two phases with buildout of Phases 1 and 2 planned for 2016 and 2020 respectively. Specifically, development of Phase 1 consists of Development Areas A and B with residential and commercial uses and Phase 2 consists of Development Area C with all commercial uses. Construction for each development phase is anticipated to be completed within an approximate 24-month timeframe.

(1) Construction Impacts

(a) Hazardous Materials Transport, Use, and Storage

Soils impacted (stained, odorous) with petroleum hydrocarbon or dry cleaning solvents (e.g., tetrachloroethylene) could be encountered during Project construction due to the historical operations of a gas station and dry cleaning operations at the Project Site. In the event hazardous materials are unearthed during Project construction, construction workers and nearby sensitive receptors may be exposed to impacted soils by either direct contact or indirect exposure during earth moving activities, loading, and transportation. With implementation of Mitigation Measures J-2 and J-3, which require the preparation of a Soil Management Plan and an environmental contractor to monitor for contamination, respectively, as well as adherence to Regulatory Compliance Measure J-2, which requires OSHA regulations pertaining to impacted soils, impacts during Phase 1 and Phase 2 construction would be less than significant.

In addition, during on-site grading and building construction, fuel and oils associated with construction equipment, as well as coatings, paints, adhesives, solvents, welding materials, and caustic or acidic cleaners could be used, handled, and stored on the Project

Site. The use, handling, and storage of these materials could increase the opportunity for hazardous materials releases and, subsequently, the exposure of people and the However, Project construction would occur in environment to hazardous materials. compliance with all applicable federal, State, and local requirements concerning the use and storage of hazardous waste, in accordance with Regulatory Compliance Measure J-1. In addition, as described in the Regulatory Framework subsection above, applicable laws and regulations are aimed at establishing specific guidelines regarding risk planning and accident prevention, protection from exposure to specific chemicals, and the proper storage of hazardous materials. As such, compliance with all applicable federal, State, and local requirements concerning the use, storage, and management of hazardous materials would effectively reduce the potential for Project construction activities to expose people to a substantial risk resulting from the release or explosion of a hazardous material, or from exposure to a health hazard, in excess of regulatory standards. Therefore, impacts related to the use, storage, and management of hazardous materials during Phase 1 and Phase 2 construction would be less than significant.

(b) Hazardous Waste Generation, Handling, and Disposal

During on-site grading and building construction, hazardous materials, such as fuels, paints, solvents, and concrete additives could be used and, therefore, would require proper management and, in some cases, disposal. The management of any resultant hazardous wastes could increase the opportunity for hazardous materials releases and, subsequently, the exposure of people and the environment to hazardous materials. Project construction would occur in compliance with all applicable federal, State, and local requirements concerning the handling and disposal of hazardous waste, in accordance with Regulatory Compliance Measure J-1. With compliance with relevant regulations and requirements, Project construction activities would not expose people to a substantial risk associated with the generation, handling, and disposal of hazardous waste in excess of regulatory standards. Therefore, impacts associated with hazardous waste management during Phase 1 and Phase 2 construction would be less than significant.

(c) Hazardous Material Storage

Excavation and grading activities during Project construction could rupture hazardous material storage and associated conduits at the Project Site, which have the potential to cause significant harm to the environment, construction workers, and off-site sensitive receptors. The historical use of a gas station at the Project Site indicates the potential for an UST and associated conveyance piping to be present on-site. However, no visual or documented evidence of current or former USTs was found during the site survey conducted as part of the Phase 1 ESA. Notwithstanding, the Phase 1 ESA recommends a subsurface investigation in the portion of the property formerly occupied by possible dry cleaners and a gasoline station to assess the possible impacts. This recommendation has

been incorporated as Mitigation Measure J-1. Furthermore, the historical USTs (if they exist) could have impacted the underlying soils and groundwater. If impacted soils are discovered during excavation and grading activities, impacts would be potentially significant. With implementation of Mitigation Measure J-2, impacts during Phase 1 and Phase 2 construction would be reduced to a less than significant level.

(d) Other Potential Hazardous Sources

Project construction would not place structures or persons in a danger zone of a site known to store, handle, or possess hazardous substances of an explosive or fire prone nature. Therefore, there would be no impacts with respect to other potential hazardous sources during Phase 1 and Phase 2 construction.

In addition, a natural gas transmission pipeline runs along the west and northwest border of the Project Site. The delineation of underground utilities prior to construction of Phase 1 and Phase 2 of the Project would be performed in accordance with Regulatory Compliance Measure J-5 to ensure that Project construction does not disrupt the existing natural gas transmission line. In addition, with implementation of Mitigation Measure J-4, a specific plan including protective measures for the pipeline would be developed if excavation is expected to occur in the vicinity of the natural gas transmission pipeline. Therefore, with implementation of Mitigation Measure J-4, impacts with respect to the natural gas transmission pipeline during Phase 1 and Phase 2 construction would be less than significant.

(e) Handling and Use of Hazardous Materials within One-Quarter Mile of a School Site

Schools, preschools, and day care centers are considered sensitive receptors for hazardous materials issues because children have been found to be more susceptible to the effect of hazardous materials compared to adults. St. Andrew Grammar School (located 0.2 mile northeast of the Project Site) and Roosevelt Elementary School (located 0.25 mile northwest of the Project Site) are both located within 0.25 mile of the Project Site. An accidental spill during Project construction could expose school children to hazardous materials. Construction activities are expected to use hazardous materials such as diesel fuel, paint, cleaners, solvents, and welding materials. However, in accordance with Regulatory Compliance Measure F-1 in Section IV.F, Air Quality, of this Draft EIR, the Project is required to incorporate fugitive dust control measures per South Coast Air Quality Management District Rule 403. In addition, diesel fuel would be stored in a temporary storage tank (typically ranging from 500 to 5,000 gallons) that would be located on the Project Site within a bermed area to assist in containing fuel in the event of an accidental spill. In accordance with Regulatory Compliance Measure J-6, a permit for the temporary storage tank would be obtained in compliance with Sections 105.6.16 and 105.7.7 of the

California Fire Code. Other hazardous materials present during construction would be in containers typically smaller than 100 gallons. Therefore, impacts to schools during Phase 1 and Phase 2 construction related to accidental spills would be less than significant due to the safety measures that would be used as well as the type and quantities of hazardous materials that are expected on the Project Site during Phase 1 and Phase 2 construction and the distance to the schools. Furthermore, implementation of Mitigation Measure J-2, which requires the preparation of a Soil Management Plan, would further reduce potential impacts to a less than significant level.

(f) CORTESE List

According to the Technical Memorandum included as Appendix H-2 of this Draft EIR, the Project Site is not listed in the CORTESE List or any of the pertinent tables of the Technical Background Report to the Safety Element of the Pasadena General Plan. Therefore, there would be no impacts with respect to the CORTESE List during Phase 1 and Phase 2 construction.

(g) Asbestos-Containing Materials and Lead-Based Paint

As previously discussed, asbestos-containing materials were observed at a few locations inside the buildings currently on the Project Site. In addition, lead-based paint may also be present on-site. However, because the existing buildings would remain intact during Project construction, it is not anticipated that any asbestos-containing materials would be released nor is it anticipated that lead-based paint would cause any hazard. In addition, Project construction would include the use of commercially sold construction materials that would not include asbestos, asbestos-containing materials, or lead-based paint. Project development is therefore not anticipated to increase the occurrence of friable asbestos, asbestos-containing materials, or lead-based paint at the Project Site. Therefore, impacts related to asbestos-containing materials and lead-based paint during Phase 1 and Phase 2 construction would be less than significant.

(h) Polychlorinated Biphenyls

As described above, potential sources of PCBs on the Project Site include the electrical transformers on the exterior portions of the Project Site, the ballasts of fluorescent lights throughout the Project Site, and the additives used in hydraulic systems. As the transformers were reportedly replaced in 2005, it is unlikely that they would contain PCBs. In addition, construction of the Project would not involve the demolition of any of the existing buildings. Furthermore, if ballasts of fluorescent lights containing PCBs are encountered during removal of the existing parking lots, the light fixtures would be disposed in accordance with local, state and federal regulations. As such, the fluorescent lights currently on the Project Site would either not be disturbed or would be disposed in

accordance with applicable regulations, and no release of PCBs is anticipated. In addition, the elevators at the Project Site are cable operated and are not operated by a hydraulic system. Furthermore, no chemicals or stains were observed in the elevator service room. As no Project construction would occur with regard to the existing on-site buildings, no risks associated with the existing on-site elevator systems would occur. Thus, the Project would not expose people to substantial risk resulting from the release or explosion of a hazardous material, or from exposure to a health hazard, in excess of regulatory standards associated with PCBs. Therefore, impacts related to PCBs during Phase 1 and Phase 2 construction would be less than significant.

(i) Emergency Response

As previously discussed, the City of Pasadena currently addresses emergency response and evacuation through its Multi-Hazard Function Plan, Devil's Gate Dam Evacuation Plan, Eaton Wash Evacuation Plan, and the Jones Reservoir Evacuation Plan. As evaluated further in Section IV.K, Public Services, of this Draft EIR, construction activities could increase response times for emergency vehicles traveling to the Project Site and nearby uses along surrounding streets. However, during construction of the Project, a construction traffic management plan would be implemented to address issues including, but not limited to, the ongoing availability of emergency access to and around the Project Therefore, implementation of Mitigation Measure K.1-1 in Section IV.K.1, Public Site. Services – Police, of this Draft EIR as well as compliance with Regulatory Compliance Measure K.2-2 and implementation of Mitigation Measure K.2-4 in Section IV.K.2, Public Services – Fire Protection, would require provisions in the Project's Construction Traffic Management Plan (see Mitigation Measure B.1-17 in Section IV.B.1, Transportation, of this Draft EIR) that address emergency vehicle access to the Project Site during Project construction. With implementation of Mitigation Measure K.1-1, Mitigation Measure K.2-4, as well as compliance with applicable regulatory requirements, construction of Phase 1 and Phase 2 would not be anticipated to significantly impair implementation of, or physically interfere with, any adopted or on-site emergency response or evacuation plans, and impacts would be less than significant. Please refer to Section IV.K, Public Services, of this Draft EIR for an analysis regarding emergency response.

(2) Operational Impacts

(a) Hazardous Materials Transport, Use, and Storage

As previously discussed, operations within the Project Site currently involve the use of limited quantities of potentially hazardous materials typical of those used for office and parking uses. These materials include janitorial supplies and maintenance materials such as paints, water treatment chemicals, ink, aerosol cans, etc. stored inside the buildings. However, no changes to existing operations of the on-site buildings would occur as part of the proposed Project.

Large quantities of hazardous materials are not anticipated to be used with development of the Project's range of permitted uses, which are summarized in Table III-3 in Section III, Project Description, of this Draft EIR. However, some of the proposed permitted uses (e.g., research and development and dry cleaners) could require the use of larger quantities of hazardous materials compared to typical office and retail uses. However, as described in Regulatory Compliance Measure J-1, all hazardous materials on the Project Site would be acquired, handled, used, stored, and disposed of in accordance with all applicable federal, State, and local requirements. In addition, the expected hazardous materials to be used on the Project Site would be packaged for retail use or in small commercial-use containers. Therefore, impacts related to the use, storage, and management of hazardous materials during operation of Phase 1 and Phase 2 of the Project, as well as at Project buildout, would be less than significant.

(b) Hazardous Waste Generation, Handling, and Disposal

As discussed above, nominal quantities of hazardous substances for office and parking uses are currently used within the Project Site. Use of hazardous substances for these activities generates small amounts of hazardous wastes on-site. No changes to existing operations of the on-site buildings would occur as part of the proposed Project. However, with implementation of the Project, it is anticipated that hazardous waste generating activities could incrementally increase at the Project Site due to the proposed increase of commercial and residential uses. However, large quantities of hazardous wastes are not anticipated to be generated, handled, or disposed of as a result of the development of the proposed office, restaurant, retail, residential, and parking uses. In addition, activities involving the handling and disposal of hazardous wastes would occur in compliance with all applicable federal, State, and local requirements. Furthermore, with adherence to Regulatory Compliance Measure J-1, hazardous wastes would continue to be properly stored and conveyed to licensed waste treatment, disposal, or recycling facilities. With compliance with relevant regulations and requirements, operational activities would not expose people to a substantial risk resulting from the release or explosion of a hazardous material, or from exposure to a health hazard, in excess of regulatory standards. Therefore, impacts associated with hazardous waste generation, handling, and disposal during operation of Phase 1 and Phase 2 of the Project, as well as at Project buildout, would be less than significant.

(c) Hazardous Material Storage

Hazardous materials stored and used on-site by Project occupants, as described above, are currently under the jurisdiction of the PFD. Under existing regulations, the

Applicant's existing hazardous materials management system must be maintained and updated annually by the Project occupants, as necessary, to include any new or additional hazardous materials and must be submitted to the PFD, as applicable, for review. Such updates and submittals would be performed, as appropriate, for any new or additional hazardous materials to be stored in conjunction with the proposed Project. In addition, as is currently the Applicant's practice, under the proposed Project all hazardous materials on the Project Site would be stored in accordance with all applicable federal, state, and local requirements. Therefore, impacts with respect to the rupture of hazardous material storage during operations of Phase 1 and Phase 2 of the Project, as well as at Project buildout, would be less than significant.

(d) Other Potential Hazardous Sources

The Project would not locate new structures in a danger zone of a site known to store, handle, or possess hazardous substances of an explosive or fire prone nature. Project construction would not place structures or persons in a danger zone of a site known to store, handle, or possess hazardous substances of an explosive or fire prone nature. In addition, implementation of Mitigation Measure J-5 would require the preparation of a technical study to identify the impact of line failure emergencies on a proposed structure proposed in the vicinity of the natural gas transmission pipeline. Therefore, with implementation of Mitigation Measure J-5, there would be no impacts with respect to a danger zone during operations of Phase 1 and Phase 2 of the Project as well as at Project buildout.

(e) Handling and Use of Hazardous Materials within One-Quarter Mile of a School Site

As described above, St. Andrew Grammar School (located 0.2 mile northeast of the Project Site) and Roosevelt Elementary School (located 0.25 mile northwest of the Project Site) are both located within 0.25 mile of the Project Site. Once construction is completed, the Site would include offices, retail, restaurant, residential units, and a multi-level subterranean parking lot. These occupants are not expected to use hazardous materials except chemicals common for janitorial, general maintenance, and domestic purposes. With adherence to Regulatory Compliance Measure J-1, which requires all hazardous materials on the Project Site to be acquired, handled, used, stored, and disposed of in accordance with all applicable federal, State, and local requirements, operation of the Project would not result in an impact related to hazardous materials to these schools. Therefore, impacts related to the handling or use of hazardous materials within 0.25 mile of a school site during operations of Phase 1 and Phase 2 of the Project, as well as at Project buildout, would be less than significant.

(f) CORTESE List

According to the Technical Memorandum, the Project Site is not listed in the CORTESE List or any of the pertinent tables of the Technical Background Report to the Safety Element of the Pasadena General Plan. Therefore, there would be no impacts with respect to the CORTESE List during operations of Phase 1 and Phase 2 of the Project as well as at Project buildout.

(g) Asbestos-Containing Materials and Lead-Based Paint

As no asbestos, asbestos-containing materials, or lead-based paint would be used during Project construction or operations, Project operations would not expose persons to friable asbestos nor lead-based paint. As a result, Project operations would not expose people to substantial risk resulting from the release or explosion of a hazardous material, or from exposure to a health hazard, in excess of regulatory standards. Thus, no significant impact associated with asbestos, asbestos-containing materials, and lead-based paint is anticipated from operation of Phase 1 and Phase 2 of the Project as well as at Project buildout.

(h) Polychlorinated Biphenyls

The new electrical systems to be installed as part of the Project would not contain PCBs. Therefore, during operation of the Project, maintenance of such electrical systems would not expose people to PCBs. In addition, the Project would comply with applicable laws regulating PCBs. As such, operation of the Project would not expose people to substantial risk resulting from the release or explosion of a hazardous material, or from exposure to a health hazard, in excess of regulatory standards. Therefore, no significant human exposure to PCBs is anticipated from operation of Phase 1 and Phase 2 of the Project as well as at Project buildout.

(i) Emergency Response

The Project is an urban infill development located within the highly urbanized Central District. As such, the Project would not affect existing emergency response and evacuation plans. Therefore, no adverse impacts to emergency response or emergency evacuation plans are anticipated.

4. Cumulative Impacts

Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. Based on the information

presented in Section IV, Environmental Impact Analysis, of this Draft EIR, there are 55 related projects located within the entire City of Pasadena. These projects are estimated to result in an increase of approximately 2,300 residential units; approximately 500,000 square feet of various types of office, retail, restaurant, and medical facilities; and approximately 1,200 hotel rooms.

A review of the Project's related projects list indicates considerable growth is proposed in the future within the Project area. This growth is anticipated to increase the risk for an accidental release of hazardous materials. Concurrent construction of several related projects could result in cumulative short-term impacts associated with construction activities. Implementation of the related projects may involve the use of construction materials such as gasoline, oils, paints and solvents, or discovery of contaminated material during excavation/earthwork activities. Long-term operations of the related projects are not likely to involve the routine transport, storage, use and disposal of hazardous materials and substances other than small quantities of pesticides, fertilizers, cleaners, paints, aerosol cans, pool chemicals, etc. used for domestic purposes and normal maintenance. As with the Project, the storage, handling and disposal of these chemicals would be performed in accordance with applicable local, state and federal regulations. Specifically, construction and operation of Related Project No. 19, which is located closest to the Project Site, would not require extensive or ongoing use of acutely hazardous materials or substances. Nor would long-term operation of Related Project No. 19 involve routine transport, storage, use, or disposal of hazardous materials and substances. Related Project No. 19 is also the only related project that is in closest enough proximity to the Project Site to result in potential cumulative impacts associated with the presence of on-site contamination attributable to prior use of the site. Based on the information presented in the CEQA Initial Study prepared for Related Project No. 19, all previous contamination at this site has been addressed to the satisfaction of all regulatory agencies. The same situation would occur at the Project Site with the implementation of regulatory compliance measures and the identified mitigation measures. As past contamination at the site of Related Project No. 19 and the proposed Project have and would be appropriately addressed, cumulative impacts with regard to the presence of hazardous conditions related to the past uses of these two sites would be less than significant.

In addition, similar to the Project, each of the related projects would be required to prepare a Hazardous Materials Business Plan (as applicable) to minimize the potential for and effects from spills of hazardous substances during construction activities. Furthermore, if soil contamination is encountered during construction of the related projects, mitigation measures such as the preparation of a Soil Management Plan would be required. In addition, as with the Project, the identified related projects and other future development projects would require evaluation for potential threats to public safety, including those associated with the use, storage, and/or disposal of hazardous materials,

asbestos-containing materials, lead-based paint, PCBs, and oil storage tanks, and would be required to comply with all applicable local, State, and federal laws, rules and regulations. Because environmental safety issues are largely site-specific, this evaluation would occur on a case-by-case basis for each individual project affected, in conjunction with development proposals on these properties. Therefore, with adherence to such regulations and implementation of any required mitigation measures, cumulative impacts with regard to hazards and hazardous materials would be less than significant.

5. Mitigation Measures

In addition to the regulatory compliance measures set forth above, the following mitigation measure is included to ensure that potential impacts related to hazards and hazardous materials would be less than significant:

- **Mitigation Measure J-1:** Prior to the start of Project construction, the Applicant shall conduct a Phase 2 ESA in the portion of the Project Site formerly occupied by possible dry cleaners and gasoline station to assess the potential for the presence of on-site contaminated materials. The Phase 2 ESA shall be reviewed and approved by the Pasadena Fire Department. In the event that on-site contamination is identified, treatment options may include, but are not be limited to, excavation and off-site disposal, soil vapor extraction, or other in-situ remedial measures. All treatment options shall be conducted in accordance with all applicable regulations and in accordance with the requirements of the Pasadena Fire Department and any other regulatory agency with jurisdiction.
- Mitigation Measure J-2: A Soil Management Plan shall be prepared and implemented, by the Applicant, that establishes the protocol to manage the environmental conditions that may be encountered during construction, including soil contamination as well as underground features such as an underground storage tank, septic tank, clarifier, etc. The Soil Management Plan shall be reviewed and approved by the Pasadena Fire Department. The Soil Management Plan shall include protocols for the following:
 - Obtaining necessary permits (e.g., South Coast Air Quality Management District Rules 1166, 402, and 403);
 - Identifying impacted soil and underground features;
 - Notification to the appropriate regulatory agencies (e.g., Regional Water Quality Control Board, Pasadena Fire Department) if environmental contamination is encountered;

- Removal of underground storage tank(s) by licensed professionals;
- Excavation of impacted soil;
- Approval for backfilling and proceeding with the construction;
- Segregation of potentially impacted material;
- Loading and transportation;
- Potential disposal options;
- Monitoring and mitigation (if required) of volatile organic compounds (if encountered) and fugitive dust in workers breathing zone as well as the perimeter of the Project; and
- Reporting to the appropriate agency or agencies.
- Mitigation Measure J-3: During Project construction in areas of the Project Site with suspected contaminated soils, there shall be an environmental contractor on-site to monitor for contamination when construction occurs in those areas. During Project construction in areas where contaminated soils are not suspected, the environmental contractor shall be on call and available in the event that unanticipated contamination is found. If contamination is found, it would be handled in accordance with applicable regulations.
- **Mitigation Measure J-4:** If excavation is expected to occur in the vicinity of the natural gas transmission pipeline, a plan shall be developed detailing protective measures for the pipeline. This plan shall be submitted to the Pasadena Fire Department for review and approval prior to any Project excavation activities.
- Mitigation Measure J-5: Prior to the issuance of any building permit in proximity to the natural gas transmission pipeline, the Applicant shall coordinate with the Pasadena Fire Department during their review of site plans to include consideration of the potential risks associated with line failure emergencies on the proposed structure, including, but not limited to, specific setback changes and/or other recommendations to decrease any potential risks.

6. Level of Significance After Mitigation

With implementation of the regulatory compliance measures and mitigation measures set forth above, Project-level and cumulative impacts related to hazards and hazardous materials during construction and operations of Phase 1, Phase 2 and Project Buildout would be less than significant.