
3.6 HAZARDOUS MATERIALS

Introduction

This section describes the types of hazardous materials historically and currently used, stored, or disposed of within the project area, the regulatory setting applicable to such activities, and the potential for construction and operation of the proposed project to result in health and safety impacts as a result of increasing the use of hazardous materials and the generation of hazardous waste.

The Department of Toxic Substances Control (DTSC) submitted comments on the Notice of Preparation (NOP) regarding the potential effects of the groundwater plume in the project area and recommended a site assessment to determine whether hazardous substances may have been released into the soil (see Appendix C). These issues are addressed in this section. The Initial Study (see Appendix B) determined that the proposed project would not use hazardous materials within ¼ mile of a school, be located in the vicinity of an airport or airstrip, impair an emergency response or evacuation plan, or expose people or structures to a significant risk due to wildland fires. Therefore, these issues are not analyzed further in this section.

No other comments were received in response to the NOP that raised concerns associated with hazardous materials or public safety.

Setting

Hazardous materials are those chemicals or substances that pose hazards to human health or safety, or to the environment, particularly if released. Hazardous wastes are a subset of hazardous materials that pose potential hazards to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Classification of Hazardous Materials

For the purposes of this DEIR, public health concerns associated with the proposed project generally fall into four categories:

- **Hazardous Materials.** Hazardous materials include chemicals and products that may be harmful if improperly released to the environment or improperly handled by people. These include a broad spectrum of products, including pesticides, petroleum fuel products, paints and other coatings, and common household materials, such as cleansers and other cleaning products.
- **Hazardous Waste.** Hazardous wastes are produced when hazardous materials are used or discarded, and may be produced by manufacturing or other processes. These include used oil products, containers of hazardous materials that are ready to be disposed, and spent solvents or other materials from manufacturing, coating, or other hazardous materials handling activities.

- **Contaminated Soil and Groundwater.** Contaminated soil and groundwater usually results from land uses that previously released hazardous materials or hazardous wastes into the soil, groundwater, or sewer systems. Leaking underground storage tanks (LUSTs) and pumps are common causes of such contaminated conditions, as are historic industrial activities that routinely spilled or disposed of hazardous materials or wastes onto soils.
- **Hazardous Building Components.** Examples of hazardous building components include asbestos-containing materials (ACMs), electric transformers containing polychlorinated biphenyls (PCBs), underground storage tanks (USTs) and aboveground storage tanks (ASTs), and lead-based paint (LBP). Applicable federal, State, and local legal requirements exist that relate to the safe maintenance and removal of these materials.

Project Area and Vicinity

The 16-acre project area is bordered by US 101 to the south, the Marsh Road/US 101 interchange to the west, Bayfront Expressway to the north, and Chrysler Drive to the east. EFI Global completed a Phase 1 Environmental Site Assessment (ESA) for the Independence site at 100 – 190 Independence Drive in 2005, as well as for the Constitution site at 105, 115, 125, and 135 Constitution Drive. In addition, SECOR International completed a Phase I ESA in 2007 for one property located on the Constitution site, 155 Constitution Drive. Information from the three Phase 1 ESAs was used in the preparation of this section.

The project area is currently designated for Limited Industrial use under the City's General Plan and M-2 zoning. Existing uses include office buildings occupied by general office, research and development (R&D), and light industrial uses. The majority of the project area was developed in the 1970s and 1980s. Historically, the project area had been used to grow row crops and remained as open grassland when not in active agricultural use. The Regional Water Quality Control Board (RWQCB) and the San Mateo County Environmental Health Division have evaluated groundwater data and remedial efforts conducted within the project area and in the surrounding area, and determined the groundwater in the vicinity of the project area is regionally impacted with low levels of chlorinated solvents.¹ Previous Ray Chem facilities located at 115 and 119 Independence Drive, within the project area, are listed on the California Spills, Leaks, Investigations, and Cleanup (SLIC) database for reported low levels of solvents (TCE and PCE). These solvents may be part of a regional groundwater plume. However, direct exposure to groundwater at the project area and, hence, the elevated levels of contaminants, is not likely because groundwater is not used for domestic purposes.

The Phase 1 ESAs prepared for the project area included a records review of hazardous materials databases, a site reconnaissance, interviews with people familiar with the various properties, as well as local and State agencies. The following is an overview of the findings of the Phase 1 ESAs for each subject property within the project area.

¹ EFI Global, *Phase 1 Environmental Site Assessment: Independence Drive Properties*, May 20, 2005, p. ii.

Independence Site. Historically, the project area was used for the agricultural production of row crops and subsequently remained fallow as open grass-covered land through the mid 1950s. The Independence site contains five parcels and is currently occupied by active office uses, a vacant office building, and a vacant lot. Former tenants of the Independence site that have previously used and stored hazardous materials, include Ultra Clean Technologies, Ampex, and Ray Chem. The former Ultra Clean Technologies office site (150 Independence Drive) contains three large ASTs for compressed gases (nitrogen, argon, carbon dioxide), and a water treatment system with two ASTs.² When in business, Ultra Clean operated under a Hazardous Materials Business Plan to ensure the safe storage and use of chemicals. Based on the historical database review, all of the parcels on the Independence site were deemed to be free of “recognized environmental conditions” (RECs).³ RECs refer to the presence or likely presence of hazardous substances or petroleum products based on existing or past releases into structures or the ground that present a risk to public health or the environment.

100 Independence Drive. The office building at 100 Independence Drive was constructed in 1965 and prior tenants included John Hancock Life Insurance, Pringle Property Management, Siltec, Integrated Test Systems, Release Software, and Geocast Network Systems. The building is currently vacant with no hazardous conditions present at the site.⁴

110 Independence Drive. The property at 115 Independence Drive is currently a vacant lot and prior research indicates that no buildings have previously been constructed on this site. No hazardous conditions were identified on the site.⁵

120 Independence Drive. The building on this site was constructed in 1967 and has primarily been used as office space. Although previous tenants include Ampex and Ray Chem that have been known to use and store hazardous materials, this building was apparently used as office space. Accordingly, no hazardous materials were used or stored onsite. Currently the building is vacant and no hazardous conditions were identified on the site.⁶

150 Independence Drive. The building at 150 Independence Drive was constructed in 1979 and has been used by Cybeq Systems and Ultra Clean Technologies. Ultra Clean Technologies is listed on the Hazardous Materials Business Plan because they use and store hazardous materials in the manufacture of subsystems for semiconductor equipment and device makers and gas and liquid delivery systems.⁷ No spills or leaks were identified for the use and storage of hazardous materials. In addition, five ASTs are still present on the property. Two are storage of compressed gas and the remaining three

² EFI Global, *Phase 1 Environmental Site Assessment: Independence Drive Properties*, May 20, 2005, p. ii.

³ Ibid, p. 24-25.

⁴ Ibid, p. i.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid, p. 17.

contained sodium bisulfate and non-foaming agents for the water treatment system. No hazardous conditions were identified on the site.⁸

190 Independence Drive. The building at 190 Independence Drive was constructed in 1979 and has been used primarily as office space since that time. Prior tenants include Siltex, Neurex, Geocast, Ultra Clean (office space) and the law firm of Latham & Watkins. No hazardous conditions were identified as being present on the site.

Constitution Site. The Constitution site includes a total of five parcels. As with the Independence site, historic uses on the Constitution site from 1943 through 1956 included agricultural uses. Only four parcels are currently developed with a mix of office, R&D, and manufacturing uses. As noted above, groundwater in the vicinity of the project area contains a contaminated solvent plume from nearby properties. Therefore, groundwater in the area of the Constitution site may be contaminated. A historical database search (on HAZNET) of federal and state records in the vicinity of the properties on the Constitution site identified adjacent parcels as containing hazardous materials including an asbestos-containing waste generator when it was occupied by Ericsson Raynet Corporation (at 150 Constitution Drive), and a generator of small quantities of laboratory waste chemicals.⁹ Across from the Constitution site, the JA Moreing Company (120 Constitution Drive) is listed on the LUST and the California SLIC databases. Property located at 115 Independence Drive is listed on the California SLIC database and groundwater samples collected at this facility reported low levels of the solvents TCE and PCE. Groundwater contamination was also noted at 119 Independence Drive. The Phase 1 ESA prepared for the Independence site also noted off-site concerns with properties located at 120 Constitution Drive, 115 Independence Drive and 119 Independence Drive. The RWQCB granted case closure of a LUST on the Constitution Drive site in April 1998, but residual concentrations of chlorinated solvents were detected in the groundwater at the site.¹⁰

Based on the historical database review, all of the parcels in the Constitution site were deemed to be free of RECs.¹¹

105 Constitution Drive. The vacant parcel at 105 Constitution Drive was previously used for growing crops from 1956 through 1965. The City of Menlo Park does not have any building permits for development of this site. According to the Phase 1, there are no identified hazardous conditions on this site.

115 Constitution Drive. The property at 115 Constitution Drive contains an office building with four suites and an attached warehouse that was constructed in 1975. The building has been occupied by various computer software, office, R&D, and high technology firms. Prior tenants include the U.S. Postal Service (USPS), Peninsula Aquatics, Baronsense, and Ray Chem.¹² Current tenants include

⁸ Ibid.

⁹ EFI Global, *Phase 1 Environmental Site Assessment: Independence Drive Properties*, May 20, 2005, p. 13.

¹⁰ Ibid, pp. 25-26.

¹¹ Ibid, pp. 24-25.

¹² Ibid, pp. ii-iii.

Ideal Aerosmith, Ideo, and Rationale Biotechnology.¹³ Hazardous materials are currently used or stored in this building, but no spills or leaks were noted. No hazardous conditions were noted on the property; however, the Phase 1 notes that there exists the potential that prior activities could have adversely affected the subsurface.

125 Constitution Drive. The property at 125 Constitution Drive includes a building that was constructed in 1971. Prior uses at this site include the manufacturing of scintillation detectors, as well as the use of solvents, acids, bases, petroleum products, radioactive beryllium, flammable liquids, TCE, toluene, freon, petroleum lubricants, and ethylene glycol. The Crytallume facility (prior tenant) reportedly used and stored hazardous materials and chemicals including solvents, toxic gases, and acids. Prior to Crytallume, the Electrofusion Corporation used and stored hazardous materials, including radioactive beryllium. When Electrofusion vacated the facility in 1986, the County of San Mateo Department of Health Services certified the site as a “clean facility.”¹⁴

In 2005 when the Phase 1 ESA was prepared, the building was occupied by Xtent and the Menlo Park City Elementary School District offices. Hazardous materials are currently used or stored by Xtent, but no spills or leaks were noted. No hazardous conditions were present at the site.¹⁵

135 Constitution Drive. The building at 135 Constitution Drive was constructed in 1969 and prior tenants included office, storage, and manufacturing uses. The building is currently vacant. No hazardous conditions were present at the site.¹⁶

155 Constitution Drive. The Phase 1 ESA prepared for 155 Constitution Drive addressed one two-story office building constructed in 1985. The most recent tenant was Gunderson Dettmer, a law firm. Neither hazardous substances nor petroleum products were discovered during a site reconnaissance of the property.¹⁷ The property at 155 Constitution Drive, based on the historical database review, was deemed to be free of RECs.¹⁸

No buildings or parcels within the project area are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5

Regulatory Setting

Hazardous materials and hazardous waste are regulated under federal, State, and local laws. In California, federal environmental laws generally establish minimum applicable standards; more stringent State and local standards may apply as well. For example, California regulates a broader array of wastes defined as “hazardous waste” than those regulated under federal law. Hazardous materials handling and hazardous waste management are subject to laws and regulations at all levels of

¹³ Personal communication, Justin Murphy, City of Menlo Park, July 13, 2009.

¹⁴ EFI Global, *Phase 1 Environmental Site Assessment: Constitution Drive Properties*, May 20, 2005, p. 12.

¹⁵ Ibid, p. 3.

¹⁶ Ibid, p. 25.

¹⁷ SECOR International, *1 Environmental Site Assessment: 155 Constitution Drive*, January 5, 2007, p. 9

¹⁸ Ibid, p. 15.

government, as summarized below. Former and existing project area uses are required to comply with these laws and regulations, in part by implementing a series of in-house policies and procedures or by correcting adverse environmental conditions that pose a risk to the public and/or the environment. The following describes the major federal, State, and local legally-required environmental procedures and programs relevant to each category.

Hazardous Materials Management and Emergency Planning. State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. The federal Emergency Planning and Community Right to Know Act (EPCRA [42 USC Section 11001, et seq.]) requires facilities that store, use, or produce certain amounts of hazardous chemicals to provide State and local authorities with material safety data sheets, or, alternatively, a list of chemicals. EPCRA also requires reporting of permitted and accidental releases of hazardous substances, and requires certain facilities to complete and submit the Environmental Protection Agency's (EPA) Toxic Chemical Release Inventory form annually.

California's Hazardous Materials Release Response Plans and Inventory Act, sometimes called the Business Plan Act (California Health and Safety Code Section 25500 et seq.) requires businesses using hazardous materials to prepare a plan that describes their facilities, chemical inventories, emergency response plans, and training programs. Businesses that use, store, or handle 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature and pressure, require hazardous materials business plans. Plans must be prepared prior to facility operation and are reviewed/updated biennially (or within 30 days of a change). In addition, the Safe Drinking Water and Toxic Enforcement Act (Proposition 65, California Health and Safety Code Section 25249.5 et seq.) requires that any person with ten or more employees operating within the State or selling products in California (1) be prohibited from knowingly discharging listed chemicals into sources of drinking water; and (2) be required to provide a "clear and reasonable" warning before knowingly and intentionally exposing anyone to a listed chemical. This warning can be given by a variety of means, such as by labeling a consumer product, by posting signs at the workplace, or by publishing notices in a newspaper.

The California Fire Code regulates storage and use of hazardous materials at commercial and industrial facilities. The California Building Code regulates how protective measures within a structure will be built and implemented. Certified Unified Program Agencies (CUPAs) are responsible for local regulation and enforcement of hazardous materials laws and regulations. The San Mateo County Environmental Health Division serves as the County's CUPA. The CUPA has been certified by the California Environmental Protection Agency (Cal-EPA) to implement six State environmental programs within the City's jurisdiction: the hazardous materials business plan/emergency response plans and inventories program; the hazardous waste program; the California accidental release prevention program; the UST program; the AST program; and the uniform hazardous materials management plan program.

Hazardous Waste Handling. The federal Resource Conservation and Recovery Act (RCRA, [42 USC Section 6901 et seq.]) regulates handling and tracking of hazardous waste from generation to disposal. Under RCRA, hazardous waste generators must comply with regulations concerning record keeping and reporting, waste storage, proper treatment and disposal, and the use of a manifest system. In California, the DTSC has been authorized by Cal-EPA to administer the RCRA program. California's Hazardous Waste Control Act (HWCA [California Health and Safety Code Section 25100 et seq.]) is similar to, but more stringent than, the federal RCRA program. The HWCA provides authority for DTSC to regulate the transportation and disposal of hazardous wastes, and establishes standards for hazardous waste facilities. The San Mateo County Environmental Health Division, as the CUPA, implements the hazardous waste program for the project area.

Soil and Groundwater Contamination. The federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA [42 USC Section 9601 et seq.]) requires cleanup of inactive or abandoned sites that are contaminated with hazardous substances. CERCLA hazardous substances are defined as either those substances specifically designated as hazardous under CERCLA, or those substances identified as hazardous under certain other laws (42 USC Section 9601 [14]). CERCLA dictates the cleanup and closure of hazardous waste sites through its Corrective Action Program. Contaminated soils may be classified as hazardous waste once excavated or otherwise handled during the cleanup process.

The California Hazardous Substances Account Act (HSAA [California Health and Safety Code Section 25300 et seq.]) is similar to CERCLA. The HSAA authorizes DTSC to order and/or oversee the cleanup of contaminated sites and hazardous substances releases. In addition, the Porter-Cologne Act (California Water Code Section 13163) authorizes the State Water Resources Control Board (SWRCB) and the local RWQCB to coordinate water quality-related investigations of State agencies. SWRCB and the local RWQCB also have jurisdiction to engage in site cleanups (California Health and Safety Code Section 25355). The project area is within the jurisdiction of RWQCB Region 2, the San Francisco Bay RWQCB.

Hazardous Building Components. Structural building components sometimes contain hazardous materials such as asbestos, PCBs, lead, and mercury. During demolition or renovation of any existing building or structure, these hazardous material building components may be disturbed and thus expose workers, the public, and the environment to these hazards. These materials are subject to various regulations, as described below.

Asbestos. Asbestos is regulated both as a hazardous air pollutant and as a potential worker safety hazard. The Bay Area Air Quality Management District (BAAQMD) and the California Division of Occupational Safety and Health Administration (Cal/OSHA) regulations restrict asbestos emissions from demolition and renovation activities, and specify safe work practices to minimize the potential for release of asbestos fibers. These regulations prohibit emissions of asbestos from asbestos-related manufacturing, demolition, or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to

federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos. California requires licensing of contractors who conduct asbestos abatement activities.

PCBs. DTSC has classified PCBs as a hazardous waste when concentrations exceed 5 parts per million (ppm) in liquids or 50 ppm in non-liquids. Fluorescent light ballasts¹⁹ may contain PCBs, and if so, they are regulated as hazardous waste and must be transported and disposed of as hazardous waste. Ballasts manufactured after January 1, 1978, should not contain PCBs and are required to have a label clearly stating that PCBs are not present.

Lead-Based Paint (LBP). Cal/OSHA standards establish a maximum safe exposure level for types of construction work where lead exposure may occur, including demolition of structures where LBPs are present; removal or encapsulation of materials containing lead; and new construction, alteration, repair, or renovation of structures with materials containing lead. Inspection, testing, and removing lead-containing building materials must be performed by State-certified contractors who are required to comply with applicable health and safety and hazardous materials regulations. Typically, building materials with LBP attached are not considered hazardous waste unless the paint is chemically or physically removed from the building debris. The U.S. Department of Housing and Urban Development has developed guidelines for the evaluation and control of LBP hazards.²⁰

Mercury. Spent fluorescent light tubes, thermostats, and other electrical equipment contain heavy metals that, if disposed of in landfills, can leach into soil or groundwater. Fluorescent light tubes typically contain concentrations of mercury that may exceed regulatory thresholds for hazardous waste and, therefore, must be managed in accordance with hazardous waste regulations. Elemental mercury can be found in many electrical switches, and when disposed of, such mercury is considered hazardous waste.

Worker Safety. Occupational safety standards exist in federal and State laws to minimize worker safety risks from both physical and chemical hazards in the workplace. Cal/OSHA is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many businesses to prepare injury and illness prevention plans and chemical hygiene plans. The Cal/OSHA Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle. For example, manufacturers are to appropriately label containers, material safety data sheets are to be available in the workplace, and employers are to properly train workers.

Hazardous Materials Transportation. The U.S. Department of Transportation (DOT) has developed regulations pertaining to the transport of hazardous materials and hazardous wastes by all modes of transportation. The USPS has developed additional regulations for the transport of hazardous materials by mail. DOT regulations specify packaging requirements for different types of materials. The EPA

¹⁹ The ballast is a small transformer that starts the light bulb and then stabilizes it on the correct operating voltage.

²⁰ U.S. Department of Housing and Urban Development, *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, June 1995, revised 1997, Chapter 7.

has also promulgated regulations for the transport of hazardous wastes. These more stringent requirements include tracking shipments with manifests to ensure that wastes are delivered to their intended destinations. In California, the California Highway Patrol, the California Department of Transportation (Caltrans), and DTSC play a role in enforcing hazardous materials transportation requirements.

City of Menlo Park General Plan and Municipal Code. The City of Menlo Park General Plan does not include any goals or policies that specifically pertain to the use, handling, or storage of hazardous materials. The City's Municipal Code Zoning Ordinance requires a conditional use permit for the use of hazardous materials in the M-2 zoning district. The proposed M-3 zoning district would retain the use permit requirement for use of hazardous materials.

Impacts and Mitigation Measures

Hazardous Materials Analysis Methodology

Information from the three ESA reports was used to describe the existing conditions within the project area and in the project vicinity: *Phase 1 Environmental Site Assessment (Independence Drive Properties)*, May 20, 2005 prepared by EFI Global; *Phase 1 Environmental Site Assessment (Constitution Drive Properties)*, May 20, 2005 prepared by EFI Global; and the *Phase 1 Environmental Site Assessment: 155 Constitution Drive*, January 5, 2007 prepared by SECOR International.

To assess the potential for the proposed project to involve the use, production, or disposal of materials in a manner that poses substantial hazards to people, or to animal or plant populations, the following analysis considers the pathways through which exposure to hazards could potentially occur, and evaluates the controls that would foreseeably be placed on each of these pathways. Exposure pathways that would be sufficiently controlled to pose no substantial hazards are considered less-than-significant health and safety issues.

Exposure pathways are means by which hazardous substances move through the environment from a source to a point of contact with people, or with animal or plant populations. A complete exposure pathway must have four parts: (1) a source of contamination, (2) a mechanism for transport of a substance from the source to the air, surface water, groundwater, or soil, (3) a point where people come in contact with contaminated air, surface water, groundwater, or soil, and (4) a route of entry into the body. Routes of entry can be eating or drinking contaminated materials, breathing contaminated air, or absorbing contaminants through the skin. Risks can be assessed when an exposure pathway is complete. If any part of an exposure pathway is absent, the pathway is said to be incomplete and no exposure or risk is possible. In some cases, although a pathway is complete, the likelihood that significant exposure will occur is very small. The analysis assumes if a pathway is complete than a potentially significant effect could occur.

Standards of Significance

The proposed project would result in a significant impact if it would:

- **Impact Criterion #1:** Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment;
- **Impact Criterion #2:** Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment; or
- **Impact Criterion #3:** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Project Evaluation

The following analysis discusses the potential impacts of the proposed project that would be allowed under the GPA/ZOA as well as the proposed Menlo Gateway project.

***Impact HM-1:** Project-related demolition or excavation in the project area could disturb hazardous materials in existing building components, but compliance with existing regulations would prevent adverse health or safety effects. This would be a less-than-significant impact. (LTS)*

All of the existing buildings in the project area would be demolished to accommodate the proposed office, R&D, retail/community facilities, hotel, health club, parking structures, and restaurant uses. Since it was common building practice to use materials with asbestos, PCBs, lead, and mercury in structures built prior to 1981, and a number of buildings in the project area were built between 1965 and 1979, demolition of the buildings in the project area could disturb these hazardous building materials and cause adverse health or safety effects to construction workers, the public, and/or the environment.

As described in the Setting, all of the buildings within the project area appear to not contain (either through use or storage) any known hazardous materials with the exception of buildings located at 150 Independence Drive and 125 Constitution Drive. However, prior to any demolition activities, the buildings at 150 Independence Drive and 125 Constitution Drive that currently use and store hazardous materials would need to follow existing laws and regulations to ensure all hazardous materials, including the ASTs, are properly removed by qualified personnel and disposed of according to current disposal regulations.

Asbestos poses health hazards only when inhaled; therefore, friable (easily crumbled) asbestos is potentially hazardous if not encapsulated. Non-friable asbestos or encapsulated asbestos does not pose substantial health risks. Upon building renovation or demolition, asbestos fibers (if present) could be disturbed, released into the air, and inhaled by construction workers or the public unless proper precautions are taken. Existing government regulations, such as the California Health and Safety Code Section 39000 et seq., limit asbestos emissions from asbestos-related demolition or construction

activities, and specific precautions and safe work practices that must be followed to minimize the potential release of asbestos fibers. BAAQMD's Regulation 11 – Hazardous Pollutants, Rule 2 – Asbestos Demolition, Renovation and Manufacturing, limits asbestos emissions from asbestos-related demolition or construction activities, and specifies precautions and safe work practices that must be followed to minimize the potential release of asbestos fibers. In light of these regulations, public health risks due to asbestos exposure during demolition are expected to be controlled and proper precautions would be implemented, and thus public health impacts from this hazardous building material would be less than significant.

Building components containing PCBs, lead, or mercury could also be found in structures located in the project area. In sufficient concentrations, lead, and mercury are regulated as hazardous wastes. RCRA requires that generators of PCBs, lead, or mercury waste test the debris for toxicity characteristics. The U.S. Department of Housing and Urban Development has prepared guidelines for evaluation and control of LBP hazards. The guidelines provide detailed, comprehensive, technical information on how to identify LBP hazards and how to control such hazards safely and efficiently, which would prevent adverse health and safety effects.

If any unidentified hazardous materials were to remain in the existing buildings when demolition occurred, these hazardous materials could create health hazards to workers or result in environmental release (or inappropriate disposal) of hazardous materials. For this reason, development in the project area could involve handling materials in a manner that poses a hazard to people, or to animal or plant populations, if appropriate hazardous materials surveys and safety precautions are not undertaken. However, existing laws and regulations (e.g., 29 CFR 1926.1101 – Asbestos and BAAQMD Regulation 11, Rule 2 – Asbestos Demolition, Renovation, and Manufacturing, the federal Toxic Substances Control Act of 1976, and the California Mercury Lamp Recycling Act of 2004) require the project sponsor to retain a qualified environmental specialist (e.g., a Cal/OSHA-certified asbestos consultant or similarly qualified individual) to inspect existing buildings subject to demolition for the presence of asbestos, PCBs, mercury, lead, or other hazardous materials in accordance with federal and state regulations. If building components containing hazardous materials are found at levels that require special handling (i.e., any building material containing 0.1 percent asbestos, paint that contains more than 5,000 ppm of lead, or any building materials known or suspected to contain PCBs or mercury), these materials would be handled as required by law and according to federal and state regulations and guidelines, including those of DTSC, BAAQMD, Cal/OSHA, and any other agency with jurisdiction over these hazardous materials. Proper handling and disposal of contaminated materials would reduce unforeseen risks to the environment and prevent potential future adverse health, safety, or environmental effects. As a result, impacts related to hazardous building components would be less than significant.

Impact HM-2: *Site grading, landscaping, excavation, and construction activities in the project area could expose construction personnel and the public to existing contaminated soil and/or groundwater if approved remediation cleanup levels have not been achieved. This would be a potentially significant impact. (PS)*

As described in the Setting, no buildings or parcels within the project area are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In addition, as described above, 115 and 119 Independence Drive and 120 Constitution Drive, within the project vicinity, are listed in the LUST and SLIC databases, and groundwater in the project area is contaminated with low levels of solvents that are thought to be part of a regional groundwater plume. Although the RWQCB declared the LUST located on the Constitution site closed in April 1998, residual concentrations of chlorinated solvents remain. The Phase 1 ESA notes that no groundwater sampling has been conducted within the project area to evaluate the quality of the groundwater that may have been affected by these adjacent uses. It is not known if any residual concentrations would pose a health concern at this time.

The depth to groundwater in the project area is estimated at approximately 5 to 10 feet below ground level. If, during excavation and other construction activities, excavation or foundation work extended to a depth greater than five feet below the ground surface, construction workers and members of the public could be at risk for exposure to potentially hazardous solvents known to exist in the groundwater. This would be considered a potentially significant health and safety impact.

MITIGATION MEASURE. If excavation in the project area exceeds five feet in depth, implementation of the following mitigation measure would reduce the potential exposure of construction workers and the public to an existing soil or groundwater contamination to a less-than-significant level. (LTS)

HM-2.1 *Prepare and implement health and safety plan.* The project sponsor shall prepare and the project contractor shall implement a site-specific health and safety plan prior to any below grade excavation activities that may encounter groundwater. The site-specific health and safety plans shall follow California and federal Occupational Safety and Health Administration (Cal/OSHA and OSHA, respectively) standards under California Code of Regulations (CCR), Title 8, Section 5192, and 29 Code of Federal Regulations (CFR) 1910.120, respectively, and any other applicable health and safety laws, regulations and/or standards. Health and safety plans shall include, among other things, a description of health and safety training requirements for on-site construction personnel, a description of the level of personal protective equipment to be used, and any other applicable precautions to be undertaken to minimize direct contact with contaminated soil or groundwater.

Impact HM-3: *Routine use or accidental release of hazardous materials during operations in the project area could expose people or the environment to these materials; however, compliance with existing regulations would ensure the safety of people and the environment, resulting in a less-than-significant impact. (LTS)*

Hazardous materials would be used in varying amounts during construction and occupancy of the project area. Products and materials typically used during construction that could contain hazardous substances include paints, solvents, cements, glues, and fuels. Exposure of site occupants to hazardous materials could occur because of improper handling or use of hazardous materials or hazardous wastes during occupancy of the proposed project, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies.

The Mixed-Use Commercial Business Park designation and M-3 zoning would permit establishments that may use and store hazardous materials, and some hazardous waste could also be generated (e.g., in Light Industrial or R&D businesses). Office and commercial activities could use a variety of products, such as cleaning agents, solvents, paints, materials used in printing, pesticides, and chemicals for landscaping. R&D uses could include laboratories or processes using chemicals. The types and amounts of hazardous materials used within each land use type would vary according to the location and nature of the activity. However, all allowable uses would be subject to applicable State and federal code requirements, as necessary, which would ensure compliance with applicable permits and inspections. For example, the federal EPCRA, (42 USC Section 11001, et seq.) requires facilities that store, use, or produce certain amounts of hazardous chemicals to provide State and local authorities with material safety data sheets, or, alternatively, a list of chemicals. In addition to the federal requirement, California's Hazardous Materials Release Response Plans and Inventory Act, sometimes called the Business Plan Act (California Health and Safety Code Section 25500 et seq.) requires businesses using hazardous materials to prepare a plan that describes their facilities, chemical inventories, emergency response plans, and training programs. Businesses that use, store, or handle 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature and pressure, require hazardous materials business plans. Because proposed on-site uses could use hazardous materials, it is likely these materials would be transported to the project area along major thoroughfares, such as US 101 or Bayfront Expressway, that provide access to the site. Due to the location of the project area, it is unlikely trucks would access the area via residential neighborhoods. However, trucks could use Chilco Street, which is close to the Belle Haven residential area.

Hazardous materials regulations, which are codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code, were established at the State level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. These regulations must be implemented by employers/businesses, as appropriate, and are monitored by the State (e.g., Cal OSHA in the workplace or DTSC for hazardous waste) and/or local jurisdictions (e.g., the Menlo Park Fire Protection District (MPFD) and the San Mateo County Environmental Health Division).

By ensuring that businesses in the project area comply with the local regulation and enforcement of hazardous materials laws and regulations, per the Certified Unified Program (CUPA), the City would reduce impacts associated with the potential for accidental release of hazardous materials during occupancy. This would be accomplished by ensuring that regulated activities (e.g., businesses) are managed in accordance with applicable regulations such as Hazardous Materials Release Response Plans and Inventories (Business Plans), the CalARP Program, and the California Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements. The San Mateo County Environmental Health Division serves as the County's CUPA. The CUPA has been certified by Cal-EPA to implement six State environmental programs within the City's jurisdiction: the hazardous materials business plan/emergency response plans and inventories program; the hazardous waste program; the California accidental release prevention program; the UST program; the AST program; and the uniform hazardous materials management plan program.

Compliance with Title 26, Division 6 (California Highway Patrol), of the CCR, which oversees the transportation of explosive and hazardous materials, would reduce impacts associated with potential for accidental release during construction or occupancy in the project area. Compliance with this regulation, monitored by the appropriate entity (i.e., Menlo Park Fire Protection District (MPFD) and the San Mateo County Environmental Health Division), would ensure that businesses and public facilities where hazardous materials are used or stored adhere to regulations designed to prevent leakage and spills of material in transit and provide detailed information to clean-up crews in the event of an accident.

Workplace regulations addressing the use, storage, and disposal of hazardous materials in Title 8 of the CCR would apply to businesses and public uses in the project area. Compliance with these regulations would be monitored by the MPFD and the San Mateo County Environmental Health Division when they perform inspections for flammable and hazardous materials storage. Other mechanisms in place to enforce the Title 8 regulations include compliance audits and reporting to local and State agencies. Implementation of the workplace regulations would further reduce the potential for hazardous materials releases.

Implementation of Title 49, Parts 171-180, of the Code of Federal Regulations would reduce any impacts associated with the potential for accidental release during construction or occupancy of the proposed project or by transporters delivering hazardous materials to the project site or picking up hazardous waste. These regulations establish standards by which hazardous materials would be transported.

Compliance with existing federal, State, and local laws and regulations that are administered and enforced by the CUPA (San Mateo County Environmental Health Division), and MPFD standards (the local agency that implements applicable hazardous materials-related sections of the California Fire Code and California Building Code) would reduce potential impacts associated with the routine use, storage, and transportation of hazardous materials associated with construction and occupancy of the proposed project to a less-than-significant level.

Cumulative Impacts

The cumulative context for hazardous materials includes the proposed project, in combination with other current projects, probable future projects and projected future growth within the City of Menlo Park over the next 20 years.

Impact HM-ICM: The proposed project, in combination with other related projects and buildout of the City, would not result in a significant cumulative impact associated with hazardous materials use, generation, disposal, transport, or clean-up. This would be a less-than-significant cumulative impact. (LTS)

Development of the proposed project, in conjunction with other projected development in Menlo Park, would increase the use of hazardous materials within the project vicinity and the City, resulting in potential health and safety effects related to hazardous materials use. Hazardous materials incidents associated with the proposed project would typically be site-specific and would involve accidental spills or inadvertent releases. Associated health and safety risks would generally be limited to those individuals using the materials or to persons in the immediate vicinity of the materials. Other cumulative development in Menlo Park would also result in site-specific impacts limited to workers and nearby residences and businesses. Implementation of applicable hazardous materials management laws and regulations adopted at the federal, State, and local level would reduce cumulative impacts related to the use of hazardous materials to less than significant.

Development in the City, which could include residential, commercial, and industrial uses, would result in an increase in hazardous materials transported in the area, and could expose greater numbers of people to increased risks in the event of an inadvertent release or spill. Stringent regulatory requirements apply to the common carriers that would handle the delivery and transport of hazardous materials to and from the project area. The likelihood of multiple incidents occurring concurrently to result in a cumulative impact is anticipated to be very remote. While these regulations do not eliminate the potential for accidents and resulting spills, they would reduce the frequency of possible occurrences and would limit the number people that could be exposed. Implementation of applicable laws and regulations would reduce potential cumulative impacts associated with the transport of hazardous materials within the region to less than significant.

For projects in the City that would involve the development or redevelopment of an existing site where soil or groundwater contamination may have occurred, the potential exists for release of hazardous materials during construction and/or remediation of those sites. For individuals not involved in construction activities, the greatest potential source of exposure to contaminants would be airborne emissions, primarily through construction-generated dust. Other potential pathways, such as direct contact with contaminated soils or groundwater, would not pose as great a risk to the public because such exposure scenarios would typically be confined to the construction zones. Assuming that site-specific risk management controls are implemented and compliance with applicable laws and regulations pertaining to site cleanup and hazardous materials management is achieved at all other locations, soil or water contamination identified in the project area would not result in significant cumulative impacts. Exposure to soil and groundwater contamination, inadvertent spills, etc. are all

localized impacts that are not expected to combine with other incidents to create a cumulative impact for the same population or environment. Moreover, an individual who is near the construction zone of one source would not likely be exposed to maximum levels off-site from another source. Implementation of applicable hazardous materials management laws and regulations adopted at the federal, State, and local levels identified above would reduce cumulative impacts related to development of known or potentially contaminated sites to less than significant.