5.7 HAZARDS AND HAZARDOUS MATERIALS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the Villages at Cabrillo Specific Plan (Specific Plan) on human health and the environment due to exposure to hazardous materials or conditions associated with the area covered by the Villages at Cabrillo Specific Plan (Plan Area), as well as with the construction and operational phases of the Specific Plan. The analysis in this section is based in part on the following source:

- *Phase I Environmental Site Assessment Century Villages at Cabrillo Specific Plan*, PlaceWorks, May 2020

A complete copy of this technical report is included Appendix F of this DEIR.

5.7.1 Environmental Setting

5.7.1.1 REGULATORY BACKGROUND

Federal, state, and local laws, regulations, plans, or guidelines related to hazards and hazardous materials that are applicable to the Specific Plan are summarized below.

Federal

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 (42 USC. § 6901 et seq.) is the principal federal law that regulates the generation, management, and transportation of waste. Hazardous waste management includes the treatment, storage, or disposal of hazardous waste. The RCRA gave the US Environmental Protection Agency (EPA) the authority to control hazardous waste from "cradle to grave," that is, from generation to transportation, treatment, storage, and disposal, at active and future facilities. It does not address abandoned or historical sites. The RCRA also set forth a framework for managing nonhazardous wastes. Later amendments required phasing out land disposal of hazardous waste and added underground tanks storing petroleum and other hazardous substances.

Comprehensive Environmental Response, Compensation and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) protects water, air, and soil resources from the risks created by past chemical disposal practices. This law is also called the Superfund Act and regulates sites on the National Priority List (NPL), which are called Superfund sites.

Emergency Planning and Community Right-to-Know Act

Title III of the Superfund Amendments and Reauthorization Act (SARA) authorized the Emergency Planning and Community Right-to-Know Act (EPCRA; 42 USC § 11001 et seq.) inform communities and citizens of chemical hazards in their areas by requiring businesses to report the locations and quantities of chemicals stored onsite to state and local agencies; releases to the environment of more than 600 designated toxic chemicals; offsite transfers of waste; and pollution prevention measures and activities and to participate

in chemical recycling. EPA maintains and publishes an online, publicly available, national database of toxic chemical releases and other waste management activities by certain industry groups and federal facilities—the Toxics Release Inventory.

To implement EPCRA, each state appointed a state emergency response commission to coordinate planning and implementation activities associated with hazardous materials. The commissions divided their states into emergency planning districts and named a local emergency planning committee for each district. The federal EPCRA program is implemented and administered in California Governor's Office of Emergency Services (Cal OES), a state commission, 6 local committees, and 81 Certified Unified Program agencies (CUPAs). Cal OES coordinates and provides staff support for the commission and local committees.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls, asbestos, radon, and lead-based paint. Title IV of the TSCA directs EPA to regulate lead-based paint hazards.

TSCA's sections 402/404 requires that those engaged in lead abatements, risk assessments and inspections in homes or child-occupied facilities (such as day care centers and kindergartens) built prior to 1978 be trained and certified in specific practices to ensure accuracy and safety. TSCA Section 403, Residential Hazard Standards for Lead in Paint, Dust and Soil, sets standards for dangerous levels of lead in paint, household dust, and residential soil.

Hazardous Materials Transportation Act

The United States Department of Transportation (DOT) regulates hazardous materials transportation under Title 49 (Transportation) of the Code of Federal Regulations (CFR). State agencies that have primary responsibility for enforcing Federal and State regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation. CFR Title 49 reflects laws passed by Congress as of January 2, 2006.

State

California Health and Safety Code and Code of Regulations

California Health and Safety Code Chapter 6.95 (Hazardous Materials Release Response Plans and Inventory) and California Code of Regulations, Title 19, Section 2729 set out the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site. A business that uses hazardous materials or a mixture containing hazardous materials must establish and implement a business plan if the hazardous material is handled in certain quantities.

California Code of Regulations, Title 22, Division 4.5

Title 22, Division 4.5, of the California Code of Regulations (CCR) sets forth the requirements for hazardous-waste generators; transporters; and owners or operators of treatment, storage, or disposal facilities. These regulations include the requirements for packaging, storage, labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste. These regulations specify the requirements for transporting shipments of hazardous waste, including manifesting, vehicle registration, and emergency accidental discharges during transportation.

Asbestos-Containing Materials (ACM) Regulations

State-level agencies, in conjunction with the USEPA and California Occupational Safety and Health Administration (Cal/OSHA), regulate removal, abatement, and transport procedures for asbestos-containing materials. Releases of asbestos from industrial, demolition, or construction activities are prohibited by these regulations and medical evaluation and monitoring is required for employees performing activities that could expose them to asbestos. Additionally, the regulations include warnings that must be heeded and practices that must be followed to reduce the risk for asbestos emissions and exposure. For example, Title 8 of the California Code of Regulations, Section 1529 (Asbestos), provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Finally, federal, state, and local agencies must be notified prior to the onset of demolition or construction activities with the potential to release asbestos.

Polychlorinated Biphenyls (PCBs) Regulations

USEPA prohibited the use of PCBs in the majority of new electrical equipment starting in 1979 and initiated a phase-out for much of the existing PCB-containing equipment. The inclusion of PCBs in electrical equipment and the handling of those PCBs are regulated by the provisions of the Toxic Substances Control Act, 15 U.S.C. § 2601 et seq. (TSCA). Relevant regulations include labeling and periodic inspection requirements for certain types of PCB-containing equipment and outline highly specific safety procedures for their disposal. The state likewise regulates PCB-laden electrical equipment and materials contaminated above a certain threshold as hazardous waste; these regulations require that such materials be treated, transported, and disposed accordingly. At lower concentrations for non-liquids, regional water quality control boards may exercise discretion over the classification of such wastes.

Lead-Based Paint (LBP) Regulations

California Occupational Safety and Health Administration's (Cal/OSHA) Lead in Construction Standard is contained in Title 8, Section 1532.1 (Lead) of the California Code of Regulations. The regulations address all of the following areas: permissible exposure limits; exposure assessment; compliance methods; respiratory protection; protective clothing and equipment; housekeeping; medical surveillance; medical removal protection; employee information, training, and certification; signage; record keeping; monitoring; and agency notification.

Regional

South Coast Air Quality Management District

South Coast Air Quality Management District (SCAQMD) Rule 1403 governs the demolition of buildings containing asbestos materials. Rule 1403 specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of ACMs. The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and cleanup procedures, and storage and disposal requirements for asbestos-containing waste materials.

Local

Long Beach Emergency Response Plan

The Long Beach Emergency Operations Plan (EOP) was approved by City Council on August 2015. The EOP, which is overseen and managed by the Office of Disaster Preparedness & Emergency Communications, meets the SEMS requirements of state law. The EOP addresses the planned response by the City of Long Beach to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The purpose of the EOP is to guide the mitigation, response, and recovery efforts of the City of Long Beach before, during and after an emergency. Under the EOP, The Emergency Planning Team provides dedicated staff responsible for managing the City's Emergency Operations Center (EOC), which include personnel from City departments (e.g., Long Beach Fire Department and Long Beach Police Department), supporting allied agencies and community organizations that have been assigned primary functions or responsibilities within the EOP (Long Beach 2015).

Long Beach Hazard Mitigation Plan

In 2017, the City adopted a Hazard Mitigation Plan in response to Disaster Mitigation Act of 2000 (also known as Public Law 106-390), which requires state and local governments to prepare Mitigation Plans to document their Mitigation Planning process, and identify hazards, potential losses, mitigation needs, goals, and strategies. This type of planning supplements the City's comprehensive emergency management program. The Disaster Mitigation Act of 2000 is intended to facilitate cooperation between state and local governments, prompting them to work together. Through collaboration, mitigation needs can be identified before disasters strike, resulting in faster allocation of resources and more effective risk reduction projects. The City's Plan includes a hazard assessment, goals and objectives, and mitigation strategies for seven hazards, including earthquake, flood, windstorm, tsunami, public health, technological and human-caused, and drought.

Long Beach Municipal Code

The following sections in Title 8 (Health and Safety) of the City of Long Beach Municipal Code address hazards and hazardous materials:

- Chapter 8.27 (Community Lead Hazard Control/Abatement)

- Chapter 8.86 (Hazardous Materials Release Response Plans and Inventory)
- Chapter 8.87 (Hazardous Waste Control)
- Chapter 8.88 (Hazardous Materials – Cleanup)

5.7.1.2 EXISTING CONDITIONS

Current Uses of the Plan Area

The Plan Area is currently comprised of a combination of one and two-story rehabilitated Naval housing and new one, two, three, four and five-story residential buildings some of which are built over enclosed garages that are lined with ground floor functions including service providers and community spaces. There are currently 865 dwelling units in the Plan Area, in addition to 12,380 square feet of amenities, 10,200 square feet of education uses, and 5,850 square feet of commercial and retail, and 26,300 square feet of services and administration. There is also approximately 5,000 square feet (0.11 acres) for play area that consists of playground, mural, shade structures, tetherball, and other amenities. Open space and parking areas also spread throughout the Plan Area.

Historical Uses of the Plan Area

Based on a review of historical aerial photographs, topographic maps, and databases, the Plan Area appears to have been mostly vacant land until it was developed into naval housing in the late 1940s/1950s until 1991 when the naval shipyard closed and the housing was transferred to assist homeless persons. In 1896, there was a structure in the northern portion of the Plan Area and was no longer present in 1923. Oil refineries and tank farms were present northwest of the Plan Area in 1942. The Plan Area has not been used for mining operations or agricultural purposes.

Recognized Environmental Conditions

"Recognized environmental conditions" are defined by the American Society of Testing and Materials as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the site. The identified presence of recognized environmental conditions at the site may warrant additional research, site investigation, and/or action. Based on the results of the Phase I Environmental Site Assessment (ESA) (Appendix F), no recognized environmental condition, historical recognized environmental condition, or controlled recognized environmental condition were identified in the Plan Area (PlaceWorks 2020).

Asbestos-Containing Materials and Lead-Based Paint

ACMs were commonly used in a wide variety of building products prior to 1980, such as roofing shingles, composite siding, linoleum flooring, acoustic ceiling tiles, furnace and water heater exhaust piping and insulation, glues and mastics, stucco, joint compounds, and composite wallboards. ACMs can be divided into material considered friable (easily crumbled or reduced to powder) and nonfriable. Friable ACMs are regulated as hazardous materials due to the elevated long-term risk of developing lung cancer upon respiratory exposure and must be properly removed prior to renovation or demolition of any structure

containing these materials. The majority of buildings that will be demolished under the Specific Plan were buildings that were primarily either rehabilitated or reused during the initial construction of the former Naval housing.

No testing is known to have been performed to evaluate for the presence of ACMs or lead-based paints (LBP) in the Plan Area. Additionally, due to the age of the buildings and structures throughout the Plan Area (many over 50 years old), it is likely ACMs and LBP, as well as other building materials containing lead (e.g., ceramic tile), were used in their construction. Therefore, there is potential for ACM and LBP materials to existing in the buildings of the Plan Area.

Polychlorinated Biphenyls

Prior to the 1970s, polychlorinated biphenyls (PCBs) were used in fluids for insulation and cooling. PCBs are considered toxic environmental contaminants, and the EPA banned the manufacture of PCBs in 1979. PCBs have been demonstrated to cause cancer and have a variety of adverse health effects on the immune system, reproductive system, nervous system, and endocrine system. According to the result of the Phase I ESA, no PCBs associated with electrical or hydraulic equipment were found to occur in the Plan Area (PlaceWorks 2020).

5.7.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

H-2 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.

H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.

H-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

H-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard or excessive noise for people residing or working in the project area.

H-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

H-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

The Initial Study, included as Appendix A, substantiates that impacts associated with the following thresholds would be less than significant:

- Threshold H-1
- Threshold H-4
- Threshold H-5
- Threshold H-6
- Threshold H-7

These impacts will not be addressed in the following analysis.

5.7.3 Environmental Impacts

5.7.3.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study (Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.7-1:	Construction and operation of development accommodated by the Specific Plan could 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 and within one-quarter mile of an existing school site. [Thresholds H-2 and H-3]

Impact Analysis: Following is a discussion of the Specific Plan's potential to create a significant hazard to the public or the environment in and around the Plan Area through the accidental release of hazardous materials during the operational and construction phases of Specific Plan. Impacts to the public include potential impacts to the two schools that are within one-quarter mile of the Plan Area, which include Cabrillo High School and California State Long Beach Technology and which border the Plan Area to the north and south, respectively.

Hazardous Materials Associated with Project Operation

Proposed and permitted land uses in the Plan Area include residential, commercial/retail, educational, administrative and supportive services, and open space uses. The development of industrial uses or other land uses involving the storage, use, transport, and disposal of large amounts of hazardous wastes are not proposed and would not be permitted under the Specific Plan. No manufacturing, industrial, or other uses utilizing large amounts of hazardous materials would occur in the Plan Area.

Operation of the proposed residential uses would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes, such as paints, household cleaners, fertilizers, and pesticides. The

types of hazardous materials that could be used during operation of future nonresidential uses (commercial/retail, educational, administrative and supportive services) are anticipated to include cleaning and maintenance products, paints, and solvents and degreasers.

The operation of the permitted uses under the Specific Plan would not involve the routine use, storage, transport, and disposal of hazardous materials, however, should such activities occur with the Plan Area they would be governed by existing regulations set forth by several agencies. Regulations that would be required of those uses that involve transporting, using or disposing of hazardous materials include RCRA, which provides the 'cradle to grave' regulation of hazardous wastes; CERCLA, which regulates closed and abandoned hazardous waste sites; the Hazardous Materials Transportation Act, which governs hazardous materials transportation on U.S. roadways; IFC, which creates procedures and mechanisms to ensure the safe handling and storage of hazardous materials; CCR Title 22, which regulates the generation, transportation, treatment, storage and disposal of hazardous waste; and CCR Title 27, which regulates the treatment, storage and disposal of solid wastes. For development within the State of California, Government Code Section 65850.2 requires that no final certificate of occupancy or its substantial equivalent be issued unless there is verification that the owner or authorized agent has met, or is meeting, the applicable requirements of the Health and Safety Code, Division 20, Chapter 6.95, Article 2, Sections 25500 through 25520.

The Long Beach Fire Department (LBFD) and Long Beach Bureau of Environmental Health (BEH) jointly function as the Certified Unified Program Agency (CUPA) for the City, and are responsible for enforcing Chapter 6.95 (Hazardous Materials Release Response Plans and Inventory) of the Health and Safety Code. As the CUPA, LBFD and BEH are required to regulate hazardous materials business plans and chemical inventory, hazardous waste and tiered permitting, underground storage tanks, and risk-management plans. The Hazardous Materials Business Plan is required to contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of on development sites. The plan also contains an emergency-response plan, which describes the procedures for mitigating a hazardous release, procedures, and equipment for minimizing the potential damage of a hazardous materials release, and provisions for immediate notification of the LBFD, BEH the Office of Emergency Services, and other emergency-response personnel, such as the local fire agency having jurisdiction. Implementation of the emergency response plan facilitates rapid response in the event of an accidental spill or release, thereby reducing potential adverse impacts. Furthermore, BEH is required to conduct ongoing routine inspections to ensure compliance with existing laws and regulations; to identify safety hazards that could cause or contribute to an accidental spill or release; and to suggest preventative measures to minimize the risk of a spill or release of hazardous substances.

Compliance with applicable laws and regulations governing the use, storage, transport, and disposal of hazardous materials would ensure that all potentially hazardous materials associated with future development accommodated by the Specific Plan are used and handled in an appropriate manner and would minimize the potential for safety impacts. Compliance with these laws and regulations is ensured through the City's development review and building plan check process.

Based on the preceding, hazards to the public or the environment arising from an accidental release of hazardous materials during project operation are not anticipated to occur.

Hazardous Materials Associated with Project Construction

Construction Activities

Construction of development projects pursuant to the Specific Plan would involve the use of larger amounts of hazardous materials than would project operation, such as fuels, lubricants, and greases in construction equipment and coatings used in construction. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities would also be short term or one time in nature.

Additionally, as with project operation, the use, transport, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations. Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

Furthermore, strict adherence to all emergency response plan requirements set forth by LBFD and BEH would be required through the duration of the construction of each individual development project. Therefore, substantial hazards to the public or the environment arising from the routine use of hazardous materials during project construction would not occur, and impacts are not anticipated to be significant.

Demolition Activities

Future development projects pursuant to the Specific Plan would require demolition of existing buildings and structures in the Plan Area. Due to the age of the buildings and structures throughout the Plan Area (many over 50 years old), it is likely that ACMs and LBP, as well as other building materials containing lead (e.g., ceramic tile), were used in their construction. Demolition of these building and structures can cause encapsulated ACM (if present) to become friable and, once airborne, they are considered a carcinogen.[1] A carcinogen is a substance that causes cancer or helps cancer grow. Demolition of the existing buildings and structures can also cause the release of lead into the air if not properly removed and handled. The United States Environmental Protection Agency (EPA) has classified lead and inorganic lead compounds as "probable human carcinogens" (EPA 2016). Such releases could pose significant risks to persons living and working in and around Plan Area, as well as to project construction workers.

Abatement of all ACM and LBP encountered during any future building demolition activities would be required to be conducted in accordance with all applicable laws and regulations, including those of the EPA (which regulates disposal); US Occupational Safety and Health Administration; US Department of Housing and Urban Development; Cal/OSHA (which regulates employee exposure), and SCAQMD. For example,

[1] When dry, an ACM is considered friable if it can be crumbled, pulverized, or reduced to powder by hand pressure. If it cannot, it is considered non-friable ACM. It is possible for non-friable ACM to become friable when subjected to unusual conditions, such as demolishing a building or removing an ACM that has been glued into place.

SCAQMD Rule 1403, requires that the owner or operator of any demolition or renovation activity have an asbestos survey performed prior to demolition. California Code of Regulations, §1532.1, requires testing, monitoring, containment, and disposal of LBP such that exposure levels do not exceed CalOSHA standards. Compliance with these regulations would reduce the project's potential impacts related to hazardous emissions or materials. Impacts would be less than significant.

5.7.4 Cumulative Impacts

The area considered for cumulative impacts is the City of Long Beach and related projects. Hazards and hazardous waste impacts are typically unique to each site and do not usually contribute to cumulative impacts. Cumulative development projects would be required to assess potential hazardous materials impacts on the development site prior to grading. The Specific Plan and other cumulative projects would be required to comply with laws and regulations governing hazardous materials and hazardous waters used and generated as described in Section 5.7.1.1. Therefore, cumulative impacts related to hazards and hazardous materials would be less than significant after regulatory compliance.

5.7.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, the following impact would be less than significant: Impact 5.7-1.

5.7.6 Mitigation Measures

No mitigation measures are required.

5.7.7 Level of Significance After Mitigation

Impact 5.7-1 is less than significant and no mitigation is required.

5.7.8 References

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5. Environmental Analysis
HAZARDS AND HAZARDOUS MATERIALS

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