

4.7 HAZARDS AND HAZARDOUS MATERIALS

This section provides the setting, regulatory framework, and impacts analysis related to hazards, including exposure to and release of hazardous materials related to the proposed project. The section is based on review of regulatory agency databases and other published reports to identify potential hazardous materials releases that may affect the proposed project including workers and the public.¹ The assessment of hazards and hazardous materials focuses on the following issues:

- The potential for encountering hazardous substances in soil and groundwater during construction at any of the proposed project sites;
- Potential public safety hazards associated with project construction;
- Potential hazards associated with the use of chemicals during construction and operation of the proposed project; and
- Whether the proposed project would result in, or be subject to, adverse effects related to the use, transportation, disposal, or release of hazardous materials or wastes during construction, operation, or maintenance.

For the purposes of this analysis, the term “hazardous materials” refers to both hazardous substances and hazardous wastes.² Under Federal and State law, materials and wastes may be considered hazardous if they are specifically listed by statute or if they are toxic, ignitable, corrosive, or reactive.

If improperly handled, hazardous materials and wastes can cause public health hazards when released to the soil, groundwater, or air. The four basic exposure pathways through which an individual can be exposed to a chemical agent include: inhalation, ingestion, bodily contact, and injection. Exposure can come as a result of an accidental release during transportation, storage, or handling of hazardous materials. Disturbance of subsurface soil during construction can also lead to exposure of workers or the public from stockpiling, handling, or transportation of soils contaminated by hazardous materials from previous spills or leaks.

This section assesses the potential public health and safety impacts of the proposed project. Hazards, such as flooding and seismic/geologic hazards, are discussed in **Section 4.5, Geology, Soils, and Seismicity** and **Section 4.8, Hydrology and Water Quality**.

Public and agency comments related to potential public health and safety impacts were received during the public scoping period, and are summarized below:

- Evaluate potential for impacts associated with the possible release of chemical and other hazardous materials as a result of the proposed project; and
- Potential for impact due to increase in mosquitos.

¹ California State Water Resources Control Board (SWRCB) “GeoTracker” database and the California Department of Toxic Substances Control (DTSC) “EnviroStor” database.

² The California Health and Safety Code define a hazardous material as “a material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety, or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, radioactive materials and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment” (Health and Safety Code, Section 25501).

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the CEQA and/or are raised by responsible agencies, they are identified and addressed within this EIR. For a complete list of public comments received during the public scoping period, refer to **Appendix A, NOP and Public Comment Letters**.

4.7.1 Environmental Setting

4.7.1.1 Regional Overview

The proposed project area is located south of the City, in an area that is west of Highway 1 in unincorporated Monterey County. Historically, lands immediately adjacent to the beach and Lagoon have been used for agricultural and housing, with the beach and much of the Lagoon used for open space and public recreation. The adjacent parcels surrounding the proposed project area are urban in nature with residential and commercial uses, roads, public services, and commercial activity, in addition to, a wastewater treatment plant.

The proposed project is more than two miles from any airport. The Carmel River Elementary School is located adjacent to the proposed EPB project component site, and the Junipero Serra School is within 0.25-mile of the proposed EPB project component site.

4.7.1.2 Site History and Characteristics

With the establishment of the nearby Carmel Mission in 1770, the area around the Lagoon was converted from riparian forests and wetlands to agricultural use. Beginning in the 1920's, the Odello Family grew artichokes in the area. In 1974, State Parks purchased what is known as the "Odello West" land, a low-lying floodplain area adjacent to the Lagoon and immediately west of Highway 1. The Lagoon and surrounding area, which total about 300 acres, were designated the Carmel River Lagoon and Wetlands Natural Preserve in 1995. In 1996, in cooperation with the Caltrans, State Parks began converting the agricultural lands back to wetlands and riparian forest. Habitat restoration efforts are ongoing.

Historic and current land uses within the proposed project area could be associated with the use, generation, or disposal of hazardous materials. Designated land uses within the proposed project area are a mix of agriculture and open space surrounded by commercial and residential use in the surrounding urban area. The proposed project area has historically been used for agricultural production that has now been converted to open space, wetland and riparian habitat. Past agricultural operations may have involved the use of petroleum fuels, pesticides, and fertilizers. Pesticides and fertilizers are applied directly to the soil, and potential releases of petroleum fuels can occur through spills and leaks from storage tanks.

Less than a ½-mile away from the proposed project site is the CAWD Wastewater Treatment Facility (CAWD facility). The CAWD facility is a secondary type plant utilizing the activated sludge process for secondary treatment. Chemicals associated with the treatment plant may be considered hazardous materials and would be subject to appropriate regulations.

A regulatory database search for past hazardous material spills on properties within ½-mile of proposed project components was conducted.³ The State Water Resources Control Board (SWRCB) database shows two incidents of leaking underground storage tanks (UST) near the site, at the CAWD Treatment Plant. Gasoline was discovered in the monitoring well, adjacent to the UST. Subsequently, the tanks were removed, the area remediated, and the case has been closed since April 2003. There are no instances of open and ongoing cases reported.

A database search showed that there are no reported incidents of hazardous materials being released in the immediate vicinity of the proposed project.

4.7.1.3 Schools

Schools are considered sensitive receptors for hazardous materials because children are more susceptible than adults to the effects of many hazardous materials. As discussed above, two schools are located within ¼-mile of the proposed project: Junipero Serra School and Carmel River Elementary School.

4.7.1.4 Hazards

WILDFIRE

The Carmel area is characterized by a moderate to very high fire hazard. Areas of moderate and high fire hazard include the urbanized area around the City, the mouth of the Carmel Valley, grassland areas, and most areas of coastal scrub. A high fire hazard prevails in most areas of Monterey pine and redwood forest. Where slopes or ridges are dominated by dense, old growth chaparral, a high to extreme fire hazard prevails. The northeasterly fringes of the Carmel coastal area and the uppermost reaches of the coastal canyons are characterized by high to extreme fire hazard due primarily to the warmer weather conditions experienced during the dry season.

The extent and adequacy of fire protection and control in various areas must also be considered. Poor roads and limited accessibility in areas of rugged terrain, such as steep mountain slopes and canyons, increase the response time for firefighting equipment and may hinder escape. The risk of damage to life and property, therefore, is more severe and fire control more difficult. In contrast, roads constructed to current County standards near Highway 1 in the more urbanized areas of the Carmel coast afford relatively quick response times. Thus, fire control and protection of property from fire damage is more readily assured (County, 1999).

California Department of Forestry and Fire Prevention (CAL FIRE) maps identify fire hazard severity zones in the State and local responsibility areas. The unincorporated area of Monterey County that surrounds the proposed project area is all designated as Incorporated Local Responsibility Areas. Portions of nearby City are designated a very high fire hazard severity zone (CAL FIRE, 2007). The proposed project area is not in a designated high or very high severity zone.

³California State Water Resources Control Board "GeoTracker" database, available online at: <http://geotracker.waterboards.ca.gov/>, and California Department of Toxic Substances Control "EnviroStor" database, available online at: <http://www.envirostor.dtsc.ca.gov/public/>.

4.7.2 Regulatory Environment

The generation, storage, and handling of hazardous materials and wastes are regulated by various Federal, State, and local laws and regulations aimed at the protection of public health and the environment. A summary of regulations follows.

4.7.2.1 Federal

RESOURCES CONSERVATION AND RECOVERY ACT

The EPA is responsible for enforcing regulations at the Federal level pertaining to hazardous materials and wastes. The primary Federal hazardous materials and wastes laws are contained in the Resources Conservation and Recovery Act (RCRA) of 1976 and in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA or Superfund). CERCLA established the National Priorities List for identifying and obtaining funding for remediation of severely contaminated sites. Federal regulations pertaining to hazardous materials and wastes are contained in the CFR (40 CFR). The regulations contain specific guidelines for determining whether waste is hazardous, based on either the source of generation or the characteristics of the waste.

U.S. DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS TRANSPORT ACT (49 USC 5101)

The U.S. Department of Transportation, in conjunction with the EPA, is responsible for enforcement and implementation of Federal laws and regulations pertaining to transportation of hazardous materials. The Hazardous Materials Transportation Act of 1974 directs the U.S. Department of Transportation to establish criteria and regulations regarding the safe storage and transportation of hazardous materials. CFR 49, 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

OCCUPATIONAL SAFETY AND HEALTH ACT (29 USC 15)

The Occupational Safety and Health Act of 1970 passed to address employee safety in the workplace. The Act created the Occupational Safety and Health Administration (OSHA), whose mission is to ensure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. The OSHA staff establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation programs.

4.7.2.2 State

The EPA has delegated much of its regulatory authority to individual States whenever adequate State regulatory programs exist. The Department of Toxic Substance Control Division (DTSC) of Cal-EPA is the agency empowered to enforce Federal hazardous materials and waste regulations in California in conjunction with the EPA.

California hazardous materials and waste laws incorporate Federal standards, but in many respects are stricter. For example, the California Hazardous Waste Control Law, the State equivalent of RCRA, contains a much broader definition of hazardous materials and waste. State hazardous materials and waste laws are contained in the CCR, Titles 22 and 26. Regulations implementing the California Hazardous Waste Control Law list 791 hazardous chemicals and 20 to 30 more common materials that may be hazardous; establish criteria for identifying, packaging and labeling hazardous waste; prescribe management of hazardous waste; establish permit requirements for hazardous waste treatment,

storage, disposal and transportation; and identify hazardous waste that cannot be disposed of in landfills.

Under RCRA, a facility is classified as a generator of hazardous waste if it generates and stores hazardous waste on site for less than 90 days; such a facility is required to obtain an EPA generator's identification number from the EPA or DTSC. If, however, hazardous waste is stored on site for longer than 90 days, the facility is classified as a Transfer, Storage, or Disposal facility and is required to obtain a RCRA Part B Storage Permit, which can take as long as two years to obtain. Transportation and disposal of hazardous materials are also regulated; hazardous waste must be characterized to determine methods of disposal and site disposal.

HEALTH AND SAFETY CODE, SECTION 25500 ET SEQ.

This code and the related regulations in 19 CCR 2620, et seq., require local governments to regulate local business storage of hazardous materials in excess of certain quantities. The law also requires that entities storing hazardous materials be prepared to respond to releases. Those using and storing hazardous materials are required to submit a Hazardous Materials Business Plan (HMBP) to their local Certified Unified Program Agency (CUPA) and to report releases to their CUPA and the State Office of Emergency Services.

HAZARDOUS MATERIALS RELEASE RESPONSE PLANS AND INVENTORY ACT OF 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Business plans contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed.

UNIFIED HAZARDOUS WASTE AND HAZARDOUS MATERIALS MANAGEMENT REGULATORY PROGRAM

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) requires the administrative consolidation of six hazardous materials and waste programs (Program Elements) under the local CUPA. The following Program Elements are consolidated under the Unified Program:

- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs (a.k.a. Tiered Permitting)
- Aboveground Petroleum Storage Tanks
- Hazardous Materials Release Response Plans and Inventory Program (a.k.a. Hazardous Materials Disclosure or "Community-Right-To-Know")
- California Accidental Release Prevention Program
- UST Program
- Uniform Fire Code Plans and Inventory Requirements

CALIFORNIA FIRE CODE, TITLE 24, PART 9, CHAPTERS 33, 50 AND 57

The 2013 California Fire Code (CFC), written by the California Building Standards Commission, is based on the 2012 International Fire Code. The International Fire Code (IFC) is a model code that regulates minimum fire safety requirements for new and existing buildings, facilities, storage and processes. The IFC addresses fire prevention, fire protection, life safety, and safe storage and use of hazardous materials in new and existing buildings, facilities, and processes.

Chapter 33 outlines general fire safety precautions for all structures during construction and demolition operations. In general, these requirements seek to maintain required levels of fire protection, limit fire spread, establish the appropriate operation of equipment and promote prompt response to fire emergencies. Features regulated include fire protection systems, fire fighter access to the site, hazardous materials storage and use, and temporary heating equipment and other ignition sources. Chapter 50 contains the general requirements for all hazardous chemicals in all occupancies and includes general provisions for the prevention, control, and mitigation of dangerous conditions related to storage, dispensing, use, and handling of hazardous materials. The Chapter 57 requirements are intended to reduce the likelihood of fires involving the storage, handling, use, or transportation of flammable and combustible liquids. Chapter 49 outlines construction methods and requirements for hazardous vegetation and fuel management in “High or Very-high Fire Hazard Severity Zones.”

UNIFORM FIRE CODE

The Uniform Fire Code, Article 80 (Section 80.103 of the Uniform Fire Code as adopted by the State Fire Marshal pursuant to Health and Safety Code Section 13143.9), includes specific requirements for the safe storage and handling of hazardous materials. These requirements are intended to reduce the potential for a release of hazardous materials and for mixing of incompatible chemicals, and specify the following specific design features to reduce the potential for a release of hazardous materials that could affect public health or the environment:

- Separation of incompatible materials with a noncombustible partition;
- Spill control in all storage, handling, and dispensing areas; and
- Separate secondary containment for each chemical storage system. The secondary containment must hold the entire contents of the tank, plus the volume of water needed to supply the fire suppression system for a period of 20 minutes in the event of catastrophic spill.

4.7.2.3 Regional/Local

EMERGENCY RESPONSE

California has developed an emergency response plan to coordinate emergency services provided by Federal, State, and local government and private entities. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services, which coordinates the responses of other agencies. The Monterey County Environmental Health Department’s Emergency Response Team provides the capabilities for hazardous materials emergencies within the proposed project area. Emergency Response Team members respond and work with local fire and police agencies, California Highway Patrol, CDFW, Caltrans, U.S. Coast Guard, and National Marine Sanctuary personnel.

MONTEREY COUNTY

In Monterey County, remediation of contaminated sites is generally performed under the oversight of the RWQCB and/or the DTSC. At sites where contamination is suspected or known to have occurred, the site owner is required to perform a site investigation and conduct site remediation, if necessary. Site remediation or development may also be subject to regulation by other agencies. For example, if a project required dewatering near a hazardous waste site, the project sponsor might be required to obtain a permit from the municipal sewer agency before discharging the water to the sewer system, or a NPDES permit from the RWQCB before discharging to the storm water collection system.

The Monterey County Environmental Health Division requires that a Business Response Plan and Inventory be prepared for facilities that generate hazardous waste or handle hazardous materials in order to plan and prepare for possible chemical releases or emergencies. In accordance with State and local regulations (CCR Title 20, Division 2, Chapter 4; California Health and Safety Code, Division 20, Chapter 6.95; and Monterey County Code Chapter 10.65), hazardous materials stored on the project site that meet or exceed the minimum threshold would require registration with Monterey County Environmental Health Bureau and Submission of a Business Response Plan through the California Electronic Reporting System. A Business Response Plan is required for businesses that generate any amount of hazardous waste or that use hazardous materials in the following amounts: 1) 55 gallons or greater for liquids, 2) 500 pounds or greater for solids, and 3) 200 cubic feet or greater for compressed gases. A Business Response Plan must include specific information on hazardous materials handled (inventory and chemical description), emergency contacts, notification procedures, evacuation plans, training procedures, and a site map. Pesticide use is regulated and permitted by the Monterey County Agricultural Commissioner's Office.

RELEVANT PLANNING DOCUMENTS

The 1982 Monterey County General Plan, Carmel Area Land Use Plan, Carmel Area Coastal Implementation Plan, Point Lobos State Reserve and Carmel River State Beach General Plan, California Coastal Act, and California PRC contain a variety of policies related to the protection from geologic and soil hazards. Please refer to **Section 4.9, Land Use and Planning** for a description of these regulations and plans, and **Appendix C, Applicable Land Use Plans, Policies, and Regulations Consistency Analysis for the Carmel Lagoon Project** for a list of relevant policies and the consistency analysis.

4.7.3 Impacts and Mitigation

4.7.3.1 Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, the project would have a significant impact relating to hazards and hazardous materials if it would:

- a. create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- b. 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;
- c. emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- d. 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;
- e. 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 would result in a safety hazard for people residing or working in the project area;
- f. for a project within the vicinity of a private airstrip, the project would result in a safety hazard for people residing or working in the project area;

- g. impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- h. expose 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.

4.7.3.2 Impact Analysis Overview

APPROACH TO ANALYSIS

The following impact analyses address potential hazardous substances in soil and groundwater that may result in impacts during construction as well as potential use and disposal of hazardous materials or waste during operation and maintenance of the proposed project. The significance criteria are assessed in this section as the basis for determining the significance of impacts related to hazards and hazardous materials. If necessary, mitigation measures are proposed to reduce significant impacts to less-than-significant.

The evaluation is based on review of hazardous materials use or release sites databases, the types of chemicals and hazardous materials that may be used during construction or operation of the proposed project, and the location of the proposed project area in relationship to schools, airports, and fire hazard zones. Each potential impact is assessed in terms of the applicable regulatory requirements, such as mandatory compliance with various Federal, State, and local regulations that would serve to prevent significant impacts from occurring.

AREAS OF NO IMPACT

Some of the significance criteria outlined above are not applicable to the proposed project or the proposed project would not result in impacts related to these criteria, as explained below.

(d) 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. (No impact during construction or operation of the proposed project). The proposed project is not located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5, or the "Cortese List." Thus, the significance criterion (d) is not applicable to the proposed project and is not discussed further.

(e, f) 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 would result in a safety hazard for people residing or working in the project area, or, for a project within the vicinity of a private airstrip, the project would result in a safety hazard for people residing or working in the project area. (No impact during construction or operation of the proposed project). This element of significance is not applicable to the proposed project because none of the proposed project components are located within the vicinity of an airport land use plan or private airstrip.

(g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. (No impact during operation of the proposed project). This element of significance is not applicable to the proposed project. The Monterey County Emergency Operations Plan provides an overview of agency roles and responsibilities during emergencies (Monterey County Office of Emergency Services, 2011). Proposed project operations would not interfere with the designated agency responsibilities and reporting in the event of an emergency, and no impact would result. Although construction activities temporarily could impede access for emergency response vehicles,

measures to avoid interference with emergency access are addressed in **Section 4.12, Traffic and Transportation**.

(h) Expose 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. (No impact during construction or operation of the proposed project). This element of significance is not applicable to the construction or operation of the proposed project. Proposed project components are not located within high fire hazard areas. The construction contractor must comply with the Public Resources Code and any additional requirements imposed by CAL FIRE and the local fire protection departments. Because the proposed project components are not located within high fire hazards areas and compliance with regulations during construction are required, the construction of the proposed project would not increase the risk of wildfire fire. Operation of the proposed project would not introduce potentially flammable activities in fire-prone areas. Accordingly, there would be no increased risk of wildland fire hazards from proposed project operations. Therefore, this significance criterion is not applicable and is not discussed further.

4.7.3.3 Impacts and Mitigation Measures

Impact HH-1: Use and Disposal of Hazardous Materials During Construction. Construction of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction. (Criterion a) (EPB: Less-than-Significant) (SRPS: Less-than-Significant) (ISMP: Less-than-Significant) (Project Overall: Less-than-Significant)

Construction of the proposed project components would involve the temporary use of hazardous materials. These materials (petroleum products such as gasoline, diesel fuel, lubricants, and cleaning solvents) would be used primarily to fuel and maintain construction vehicles and equipment; the accidental release of these substances is addressed separately, below. Hazardous materials stored on the project site during construction activities that meet or exceed the minimum threshold would be registered with Monterey County Environmental Health Bureau and a Business Response Plan would be submitted through the California Electronic Reporting System, in compliance with State and local regulations. The transportation of hazardous materials and wastes is regulated by the California Department of Transportation and the California Highway Patrol, which regulates container types and packaging requirements as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. All vendors must comply with existing and future hazardous materials laws and regulations for the transport of hazardous materials; therefore, the risk of accidental releases of hazardous materials during normal (routine) transport operations would not constitute a significant hazard.

Because the County and their contractors would be required to comply with existing and future hazardous materials laws and regulations covering the transport, use, and disposal of hazardous materials, the impacts associated with the potential to create a significant hazard to the public or the environment would be less-than-significant.

Impact Conclusion

The construction of the proposed project would result in a less-than-significant impact due to the routine transport, use, or disposal of hazardous materials during construction; therefore, no mitigation measures would be required.

Impact HH-2: Accidental Release of Hazardous Materials During Construction. Proposed project construction would potentially cause upset and accident conditions involving the release of hazardous materials into the environment. (Criterion b) (EPB: Less-than-Significant) (SRPS: Less-than-Significant) (ISMP: Less-than-Significant) (Project Overall: Less-than-Significant)

There are typically two types of releases that could occur during construction: (1) the accidental release of hazardous materials that are routinely used during construction activities; and (2) the potential for construction activities to encounter and excavate contaminated soil or groundwater that are already present at the construction site, and, thus, release it to expose new receptors to the hazard.

Hazardous materials that could be used during construction activities include fuels, lubricants, paints, and solvents. Storage and use of hazardous materials at construction sites and staging areas could potentially result in the accidental release of small quantities of hazardous materials, which could pose a risk to construction workers and the environment, such as degradation of soil and groundwater quality and/or surface water quality.

However, as discussed in **Section 4.8, Hydrology and Water Quality**, the construction contractor would be required to prepare a SWPPP for construction activities in accordance with the General Construction Permit requirements. The SWPPP would list the hazardous materials (including petroleum products) proposed for use and describe measures for preventing spills, inspecting equipment and fuel storage, and providing immediate response to spills. Through compliance with applicable hazardous materials storage and stormwater permitting regulations, the impacts from potential releases of hazardous materials or petroleum products during construction would be less-than-significant for all proposed project components.

Construction of the proposed project components would result in ground disturbance with the potential to encounter groundwater. The database search did not identify any hazardous materials release sites within 0.25 mile of the proposed project site, although unknown contaminants could be encountered during construction. Therefore, construction at the proposed project site would have a less-than-significant impact due to the potential release of hazardous materials into the environment.

Impact Conclusion

Construction of the proposed project components would not result in significant impacts related to the accidental release of hazardous materials in the environment. The construction contractor would be required to prepare a SWPPP for construction activities in accordance with the General Construction Permit requirements. The database search did not identify any hazardous materials release sites within 0.25 mile of the site, and, therefore, the likelihood of encountering any unknown contaminants is low. Through compliance with applicable hazardous materials storage and storm water permitting regulations, the impacts from potential releases of hazardous materials or petroleum products during construction would be less-than-significant for all proposed project components. Therefore, this impact is less-than-significant and no mitigation measures are required.

Impact HH-3: Use of Hazardous Materials During Construction Within 0.25-Mile of Schools. Proposed project construction would not result in nor create a significant hazard to the public or the environment due to handling of hazardous materials or hazardous emissions within 0.25 mile of a school during construction. (Criterion c) (EPB: Less-than-Significant) (SRPS: Less-than-Significant) (ISMP: Less-than-Significant) (Project Overall: Less-than-Significant)

Schools and daycare facilities are considered sensitive receptors for hazardous materials because children are more susceptible than adults to the effects of many hazardous materials. The proposed project components are within 0.25 mile of the Carmel River Elementary School. In addition, the proposed EPB project component is within 0.25 mile of the Junipero Serra School.

As discussed above under **Impact HH-1**, project construction could require the use of fuel, lubricants, paints, and solvents. These materials are commonly used during construction, are not acutely hazardous, and would be used in small quantities. Numerous laws and regulations ensure the safe transportation, use, storage, and disposal of hazardous materials (see **Section 4.7.2, Regulatory Environment**). Construction of the proposed project components would occur within 0.25 mile of schools; however, the hazardous materials storage and stormwater permitting requirements discussed under **Impact HH-1**, above, impose performance standards on the construction activities that would ensure the risk of release of hazardous materials during construction would be low. Although construction activities could result in the inadvertent release of small quantities of hazardous construction chemicals, a spill or release is not expected to endanger individuals at nearby schools given the nature of the materials and the small quantities that would be used.

Therefore, because the County and their contractors would be required to comply with existing and future hazardous materials laws and regulations covering the transport, use, and disposal of hazardous materials, and because of the nature and quantity of the hazardous materials, the potential impact on schools related to the use of hazardous materials at these sites that are within 0.25-mile would be less-than-significant.

Impact Conclusion

Construction of proposed project components would not result in a significant impact related to the handling of hazardous materials within 0.25 mile of a school; therefore, no mitigation is necessary.

Impact HH-4: Use and Disposal of Hazardous Materials and Accidental Release or Creation of Safety Hazards During Operation. Operation and maintenance of the proposed EPB and SRPS project components would not create a significant hazard to the public or the environment through the: 1) routine transport, use, or disposal of hazardous materials, 2) accidental release of hazardous materials, or 3) creation of safety hazards during operations. (Criteria a, b, and c) (EPB: Less than-Significant) (SRPS: Less-than-Significant) (ISMP: No Impact) (Project Overall: Less-than-Significant)

The operation and maintenance at the proposed EPB and SRPS project components sites would not involve the routine storage or use of hazardous materials, except for very small amounts of fuel and lubricants related to the pump stations at the proposed EPB project component site. Impacts related to the use, disposal, and inadvertent release of hazardous materials during operation of these facilities is less-than-significant.

In the past, stagnant water sources at the CAWD facility have become mosquito breeding habitat and required treatment. However, mosquitos have rarely been reported as an issue within the residential areas adjacent to the Carmel Lagoon. While conditions conducive to mosquito breeding exist within the lagoon such as shallow and changing water depths, slow moving water and large stands of wetland and emergent vegetation, the Monterey County Mosquito Abatement District (MCMAD) reports that complaints have warranted the placement of traps only once in the last decade (MCMAD, personal communication with staff, 2016). Mosquitos were caught in the traps, but not in sufficient numbers to require any treatment by the MCMAD. The lack of significant mosquito populations within and adjacent to the lagoon is likely the result of the fairly consistent wind and fog which keeps temperatures low and agitates the water. Both of these factors can significantly limit mosquito larval development (Purdue University, 2003).

The proposed project would result in 2.1 acres of the lagoon being isolated from the main body by the placement of the proposed EPB project component. This isolated area would consist of existing wetland on the developed or interior side of the proposed EPB project component adjacent to existing residential development. The current condition of this area is undeveloped wetland. While the installation of the proposed EPB project component would change the hydrology of the site to some degree from tidal to seasonal, it would remain a wetland and would continue to be dominated by a combination of open water and wetland vegetation and hydrology (Balance Hydrologics, Inc., 2015). The amount of quality of potential mosquito habitat will not significantly change as a result of the proposed EPB project component. In addition, the conditions which limit the larval development such as wind and fog would not change as a result of the project. As a result, conditions relevant to mosquito breeding would not be significantly changed as a result of the construction of the proposed EPB project component. This is a less-than-significant impact. No mitigation measures are required.

Impact Conclusion

Proposed project operations would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, accidental release, or creation of safety hazards during proposed project operations; therefore, no mitigation measures would be required.

4.7.4 References

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