

5.8 Hazards and Hazardous Materials

This section describes the applicable laws and policies related to hazards and hazardous materials, discusses the environmental setting relative to hazards and hazardous materials, including marine hazards associated with construction activities on the intake and discharge pipelines, evaluates potential environmental impacts associated with implementation of the proposed Project, and recommends mitigation measures to avoid/lessen potential Project impacts.

Refer to Section 5.2, *Air Quality*, for a discussion concerning the Project’s potential impacts related to air quality hazards, Section 5.6, *Geology and Soils*, for a discussion concerning the Project’s potential impacts related to geologic and seismic hazards.

5.8.1 Regulatory Framework

Definitions

Definitions of terms used in the regulatory framework, characterization of baseline conditions, and impact analysis for hazards and hazardous materials are provided below.

Hazardous Material: The term “hazardous material” can have varying definitions depending on the regulatory programs. For the purposes of this Environmental Impact Report (EIR), the term refers to both hazardous materials and hazardous wastes. The California Health and Safety Code Section 25501(p) defines hazardous material as: *Hazardous material means any material that because of its quantity, concentrations, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.*

Hazardous Waste: A “hazardous waste” is a waste that, because of its quantity, concentration, or physical, chemical, or infectious characteristic, causes or significantly contributes to an increase in mortality or illness or poses substantial or potential threats to public health or the environment (42 U.S.C. 6903(5)). Hazardous wastes are further defined under the Resource Conservation and Recovery Act (RCRA) as substances exhibiting the characteristics of ignitability, reactivity, corrosivity, or toxicity. Chemical-specific concentrations used to define whether a material is a hazardous, designated, or nonhazardous waste include Total Threshold Limit Concentrations (TTLCs) and Soluble Threshold Limit Concentrations (STLCs). TTLCs and STLCs are listed in California Code of Regulations (CCR) Title 22, Chapter 11, Article 3, Section 66261. TTLCs and STLCs are used as acceptance criteria for landfills. For example, waste materials with chemical concentrations above TTLCs or STLCs must be sent to Class I disposal facilities, may be sent to Class II disposal facilities depending on the waste material, and may not be sent to Class III disposal facilities.

Types of Hazardous Waste Generators: Hazardous waste generators are divided into three different categories based on the type of waste produced and how much is produced in any one

month: (1) conditionally exempt small-quantity generators produce less than or equal to 100 kilograms of hazardous waste per month; (2) small-quantity hazardous waste generator produces more than 100 kilograms, but less than 1,000 kilograms of hazardous waste per month; and (3) large-quantity hazardous waste generators produce 1,000 kilograms or more of hazardous waste per month.

Screening Levels for Hazardous Materials in Soil, Soil Gas, or Groundwater: The U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) and San Francisco Bay Area Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) are guidelines used to evaluate the potential risk associated with chemicals found in soil or groundwater where a release of hazardous materials has occurred. Although developed and maintained by the San Francisco Bay Area RWQCB, ESLs are used by regulatory agencies throughout the state. Screening levels have been established for both residential and commercial/industrial land uses, and for construction workers. Residential screening levels are the most restrictive; soil with chemical concentrations below these levels generally would not require remediation and would be suitable for unrestricted uses if disposed of off-site. Commercial/industrial screening levels are generally less restrictive than residential screening levels because they are based on potential worker exposure to hazardous materials in the soil (and these are generally less than residential exposures). Screening levels for construction workers are also less restrictive than for commercial/industrial workers because construction workers are only exposed to the chemical of concern during the duration of construction, while industrial workers are assumed to be exposed over a working lifetime. Chemical concentrations below these screening levels generally would not require remediation and would be suitable for unrestricted uses.

Federal

According to USEPA, special handling and management are required for materials and wastes that exhibit hazardous properties. Treatment, storage, transport, and disposal of these materials are highly regulated at both the federal and state levels. Compliance with federal and state hazardous materials laws and regulations minimizes the potential risks to the public and the environment presented by these potential hazards.

Resources Conservation and Recovery Act

The RCRA (42 U.S.C. Section 6901 et seq.) gives USEPA the authority to control hazardous waste from “cradle-to-grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste by “large-quantity generators” (1,000 kilograms/month or more). Under RCRA regulations, hazardous waste must be tracked from the time of generation to the point of disposal. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous waste is stored for more than 90 days or treated or disposed of at a facility, any treatment, storage, or disposal unit must be permitted under RCRA. Additionally, all hazardous waste transporters are required to be permitted and must have an identification number. RCRA allows individual states to develop their own program for the regulation of hazardous waste, as long as it is at least as stringent as RCRA. In California, USEPA has delegated RCRA enforcement to the State of California through the Department of Toxic Substances Control (DTSC) and other state agencies.

Superfund Amendment and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) pertains primarily to emergency management of accidental releases. It requires formation of state and local emergency planning committees, which are responsible for collecting material handling and transportation data for use as a basis for planning. Chemical inventory data is made available to the community at large under the “right-to-know” provision of the law. In addition, SARA also requires annual reporting of continuous emissions and accidental releases of specific compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory.

SARA amended Superfund to increase state involvement and required Superfund actions to consider state environmental laws and regulations. SARA also established a regulatory program for the Emergency Planning and Community Right-to-Know Act. The applicable part of SARA is Title III, otherwise known as the Emergency Planning and Community Right-to-Know Act of 1986. Title III requires states to establish a process for developing local chemical emergency preparedness programs and to receive and disseminate information on hazardous substances present at facilities in local communities. The law provides primarily for planning, reporting, and notification concerning hazardous substances. Key provisions require notification when extremely hazardous substances are present above their threshold planning quantities, immediate notification to the local emergency planning committee and the state emergency response commission when a hazardous material is released in excess of its reportable quantity,¹ and that material safety data sheets for all hazardous materials or a list of all hazardous materials be submitted to the state and local emergency planning agencies and local fire department.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act (HMTA) (49 U.S.C. 5101-5127) is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, highways, air, or in pipelines. The HMTA includes provisions for material classification, packaging, marking, labeling, warning placards, and shipping documentation.

The U.S. Department of Transportation (DOT) has developed a system of numerical designations (the International Classification System) that must be displayed on placards, labels, and/or shipping papers. Any hazardous material being transported is classified according to its hazardous properties. This system classifies hazardous materials with nine different classes (1–9) based on a number of characteristics, including explosives, gases, flammable liquids and solids, oxidizers, poisons, etc. In addition to the numerical classification system for hazardous materials, the DOT has established a placard system for transporting hazardous waste, which has been adopted by USEPA, who regulates these shipments. These placards are required to be displayed on all sides on any truck or railcar that transports hazardous materials.

¹ Certain chemicals have specific volumes above which they must be reported if released, as set forth in 40 CFR Part 302.

Marine Safety Manual

The U.S. Congress established the U.S. Coast Guard with roles in maritime homeland security, maritime law enforcement, search and rescue, marine environmental protection, the maintenance of river, and intracoastal and offshore aids to navigation. Marine safety is one of its core missions, which includes inspecting commercial vessels, responding to pollution, investigating marine casualties and merchant mariners, managing waterways, and licensing merchant mariners. The U.S. Coast Guard implements and enforces the Marine Safety Manual, which includes procedures and performance standards regarding commercial marine vessels, marine pollution prevention, and navigational safety.

State

Hazardous Materials Release Response Plans and Inventory Act

The Hazardous Materials Release Responses Plans and Inventory Act (also known as the Hazardous Materials Business Plan Program, or HMBP Program) (California HSC, Division 20, Chapter 6.95) establishes business and area plans relating to the handling and release or threatened release of hazardous materials. Under the HMBP Program, businesses are required to submit basic information to firefighters, health officials, planners, public safety officers, health care providers, regulatory agencies and any other interested persons regarding the location, type, quantity, and health risks of hazardous materials which are handled, used, stored, or disposed of in the state.

Hazardous Substances Account Act

The Hazardous Substances Account Act (HSAA), also known as the “California Superfund” (California HSC, Section 21500, et seq.), is the state’s Superfund program that authorizes the California Environmental Protection Agency (Cal EPA) to clean up contaminated sites and hazardous substance releases into the environment that do not qualify for cleanup under Superfund. The HSAA establishes regulations and incentives to ensure that generators of hazardous waste use technology and best management practices for the safe handling, treatment, recycling, and destruction of their hazardous waste prior to disposal.

Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) (California HSC, Division 20, Chapter 6.5, Article 2, Section 25100, et seq.) is California’s primary hazardous waste statute. The HWCL implements RCRA as California’s cradle-to-grave waste management system. HWCL specifies that generators have the primary duty to determine whether their wastes are hazardous and ensure their proper management. The HWCL also establishes criteria for reuse and recycling of hazardous waste used or reused as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning, and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of wastes and waste management activities that are not covered by federal law with RCRA.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (Health and Safety Code Section 25404 et seq.) required the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a Certified Unified Program Agency (CUPA). The Program Elements consolidated under the Unified Program are: Hazardous Waste Generator and On-Site Hazardous Waste Treatment Programs (a.k.a. Tiered Permitting); Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan; 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; and Uniform Fire Code Plans and Inventory Requirements. The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs. The Unified Program is implemented at the local government level by CUPAs. Most CUPAs have been established as a function of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency, a participating agency, which implements one or more Program Elements in coordination with the CUPA. For this Project area, the local CUPA is the Environmental Safety Division within the City of El Segundo Fire Department.

Safe Drinking Water and Toxic Enforcement Act of 1986

The Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) amended the Health and Safety Code to require that persons doing business neither expose individuals to carcinogens or chemicals causing reproductive toxicity without giving clear and reasonable warning, nor discharge such chemicals into drinking water. The Office of Environmental Health Hazard Assessment is the responsible agency for implementation of Proposition 65.

Accidental Release Prevention Law

The state’s Accidental Release Prevention Law provides for consistency with federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the state and federal programs. State and federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower than the federal quantities. Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the CUPAs and requires that any business, where the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the responsible CUPA as a manager of regulated substances and prepare a Risk Management Plan. A Risk Management Plan must contain an offsite consequence analysis, a 5-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their Risk Management Plan to the CUPA, which makes it available to emergency response personnel. Additionally, businesses must prepare a business plan, which is required to identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

Transportation of Hazardous Materials/Wastes

Transportation of hazardous materials/waste is regulated by CCR Title 26. The DOT is the primary regulatory authority for the interstate transport of hazardous materials. The DOT establishes regulations for safe handling procedures (i.e., packaging, marking, labeling, and routing). The California Highway Patrol (CHP) and California Department of Transportation enforce federal and state regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary between federal, state, and local governmental authorities and private persons through a state-mandated Emergency Management Plan.

Worker and Workplace Hazardous Materials Safety

Occupational safety standards exist to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (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 Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle.

Cortese List

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. The Cortese list includes hazardous waste sites (e.g., cleanup sites such as leaking underground storage tanks (USTs), landfills, oil and gas sites, and sites with active waste discharge requirements or permits. The information is sorted by site name; clicking on the site name links to the profile and supporting report for that particular site. Government Code Section 65962.5 requires the following agencies to provide information: DTSC, State Water Resources Control Board (SWRCB), state Department of Health Services, and the Department of Resources Recycling and Recovery. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List through the above-listed agencies. The Cortese List can be accessed at the DTSC EnviroStor website (<http://www.envirostor.dtsc.ca.gov/public/>) or at the SWRCB GeoTracker website (<http://geotracker.waterboards.ca.gov/>), both of which access each other's database and can provide a complete list of sites listed on the Cortese List.

Regional

County of Los Angeles Airport Land Use Commission

In compliance with the legislative requirements, the Los Angeles County Airport Land Use Commissions (ALUC) prepared the Los Angeles County Airport Land Use Plan (ALUP) adopted October 20, 2008, and amended December 1, 2008. The ALUP implements policy and regulations for lands that fall under ALUC jurisdiction. The ALUP provides for the orderly expansion of Los Angeles County's public use airports and the areas surrounding them. It is also

intended to provide for the adoption of land use measures that will minimize the public's exposure to excessive noise and safety hazards. In formulating the ALUP, the Los Angeles County ALUC established provisions for safety, noise insulation, and the regulation of building height within areas adjacent to each of the county's public airports. The ALUC adopted planning boundaries for each of the public use airports in Los Angeles County. The planning boundaries delineate areas subject to noise impacts and safety hazards (height restriction areas and approach surface and runway protection zones). The airport influence area maps illustrate the planning boundaries, runway protection zones, and 65 and 70 CNEL noise contours. Refer to Section 5.11, *Noise*, for a discussion of noise impacts.

Local

City of El Segundo General Plan

The *City of El Segundo General Plan* Conservation and Public Safety Elements address hazards and hazardous materials. Following are the relevant General Plan goals, objectives, policies, and programs:

Conservation Element.

Goal CN3: Groundwater Contamination – Protect groundwater and coastal waters from contamination.

Policy CN3-1: Identify any source contamination originating within the city limits.

Policy CN3-2: Require written notification of groundwater contamination to the city by any state or regional permitting agency.

Policy CN3-3: Monitor compliance with any state or regional permitting agency.

Policy CN3-4: Make permit and compliance information available to the community.

Public Safety Element. It is the General Plan Public Safety Element's intent to reduce death, injuries, property damage, and economic and social dislocation resulting from natural and man-made hazards such as urban fire, flooding, mudslides, earthquakes, and hazardous incidents. Relevant hazardous materials-related goals, objectives, and policies include the following:

Goal PS3: Petroleum Resources/Hazardous Materials Waste - Reduce threats to public health and safety from hazardous materials, especially threats induced by earthquakes and accidental leaks and spills.

Objective PS3-1: It is the objective of the City of El Segundo that the city insures safe and prudent use of hazardous materials, and reduces the quantity of hazardous materials handled within the city.

Policy PS3-1.1: Review proposed development projects involving the use, storage, and disposal of hazardous materials with the intent of minimizing the probability of magnitude of a hazardous event.

Program PS3-1.1A: The city shall enforce local, state, and federal laws such as the 1984 amendments to the Federal Resource Conservation and Recovery Act,

through review of projects proposing to use, store, or dispose of hazardous materials and waste. The city shall also require compliance with the business plan, and onsite emergency response plans before project approval with intent to ensure the following:

- Preparation and maintenance of a hazardous materials inventory as required by existing codes;
- Preparation of a site plan showing onsite hazardous materials storage as required by existing codes;
- Preparation and maintenance of onsite adequate emergency response equipment;
- Implementation of environmental audits for tracking hazardous materials during and after use;
- Preparation of plans for monitoring, inspection, and record keeping to verify control efforts;
- Provision for treatment or control of all unauthorized emissions, discharges, or releases through the best available technology; and,
- That plans are developed and implemented for training of personnel to safely manage and use hazardous materials and waste.

Policy PS3-1.2: Promote the safe transportation of hazardous materials.

Program PS3-1.2A: The city shall establish a system to monitor the transportation and disposal of hazardous wastes or access the existing state system.

Policy PS3-1.4: Continue to encourage source reduction, substitution, and recycling.

Policy PS3-1.5: Encourage improved, timely communications between businesses and emergency response agencies regarding hazardous materials prior to and during incidents.

Goal PS4: Water and Soil Contaminants - Prevent exposure of people, animals, and other living organisms to toxic water and soil contaminants.

Policy PS4-1: Monitor industries and activities in and around the city to prevent and reduce the contamination of water and soil.

Policy PS4-1.1: It is the policy of the City of El Segundo to use its best efforts to protect residents, visitors, and the environment of the city from the effects of toxic water and soil contaminants by identifying major sources in and around the city and by promoting compliance with all federal, state, regional, and local regulations.

Policy PS4-1.2: It is the policy of the City of El Segundo to draft and implement ordinances or take other actions, where deemed appropriate by the City Council in its discretion, to restrict and/or reduce water and soil contamination from sources in and around the city.

Goal PS6: Urban Fire Hazard – A fire safe community.

Objective PS6-1: It is the objective of the City of El Segundo that the city minimizes threats to public safety and protects property from wildland and urban fires.

Policy PS6-1.1: Review projects and development proposals, and upgrade fire prevention standards and mitigation measures in areas of high urban fire hazard.

Policy PS6-1.2: Continue efforts to reduce fire hazards associated with older buildings, high-rise buildings, and fire-prone industrial facilities, and maintain adequate fire protection in all areas of the city.

Goal PS7: Emergency Preparedness – Protect public health, safety, and welfare, and minimize loss of life, injury, property damage, and disruption of vital services, resulting from earthquakes, hazardous material incidents, and other natural and man-made disasters.

Hazardous Materials and Waste Management Element. Consistent with state law, the City has elected to prepare and adopt its own Hazardous Waste Management Element, incorporating by reference, as appropriate, applicable portions of the Los Angeles County Hazardous Waste Management Plan (LACoHWMP). This Element and its accompanying background report are intended to be that plan. As such, this Element should be recognized as an expansion of the City's traditional concern regarding hazardous materials to include hazardous waste management. This Element's objectives are diverse and reflect the specific issues facing the city and nation concerning hazardous materials and wastes. Applicable hazardous materials-related objectives and policies include the following:

Goal HM2: Minimize Risks

Objective HM2-1: Maintain and update a comprehensive emergency plan consisting of measures to be taken during and after hazardous material spills.

Policy HM2-1.1: Enhance the existing efforts of the El Segundo Fire Department to coordinate the preparation of individual business plans and an area plan.

Policy HM2-1.2: Enhance existing emergency response capabilities.

Policy HM2-1.3: Ensure maintenance of equipment and adequate training of personnel.

Policy HM2-1.4: Establish evacuation routes for emergencies and coordinate emergency response with neighboring cities and the county.

Goal HM3: Compliance with State Laws – Ensure compliance with state laws regarding hazardous materials and waste management.

Objective HM3-1: Assist the state and county as appropriate in the dissemination of regulatory information about hazardous materials and waste to the public and businesses.

Policy HM3-1.1: Ensure, through appropriate cooperation with state and county enforcement agencies, that all companies within the city comply with applicable hazardous material management laws.

Goal HM4: State, Federal, and County Goals - Assist in meeting state, federal, and county hazardous materials and waste management goals, as these are consistent with city goals.

Goal HM5: Waste Generation – Assist in meeting state and county goals to reduce hazardous waste generation to the maximum extent possible.

Objective HM5-1: Identify all generators and transporters of hazardous materials and wastes within the city, and either establish a system to monitor the transportation and disposal of these wastes or access the existing state system.

Policy HM5-1.1: Adopt waste minimization as a first priority in waste management strategies in the city.

Policy HM5-1.2: Require all businesses generating hazardous wastes within the city to submit annual status reports to the County Department of Public Works.

Policy HM5-1.3: Assist the state and county, as appropriate, in providing information needed by the public and industries to take rational steps to minimize, recycle, treat, and otherwise manage hazardous waste.

Policy HM5-1.4: Continue efforts to promote and expand citizen participation in the existing program to collect and dispose of household waste.

Goal HM6: Siting Hazardous Waste Management Facilities – Identify areas within the city potentially suitable for siting hazardous waste management facilities consistent with the criteria presented in the LACoHWMP and consistent with the city General Plan.

Policy HM6-1: Ensure consistency of any proposed facility siting with city land use decisions, city zoning, this Element, and the LACoHWMP.

Policy HM6-2: Ensure consideration of human, social, and environmental factors in any siting decision.

Policy HM6-3: Ensure consideration of routing criteria and traffic problems in any siting decision.

Policy HM6-4: Ensure that sites of any facilities are located near generators and in appropriately zoned areas.

Both the CHP and LACoHWMP have identified transportation routes and corridors in and near the city that are considered suitable for transporting hazardous materials and wastes. The city has additional ordinances affecting the transport of such materials.

City of El Segundo Standardized Emergency Management System Emergency Operations Plan

The City of El Segundo prepared the *Standardized Emergency Management System (SEMS) Emergency Operations Plan (EOP)* in 2003 to address the City's planned response to extraordinary emergencies. The EOP functions as an emergency preparedness document. The EOP's objectives are to: establish emergency operations; assign tasks, specific policies, and procedures; and assign planning efforts to various emergency staff pursuant to the SEMS. The

EOP is composed of three multi-part elements and includes an Administrative Element, Operational Element, and Appendices.

City of El Segundo Multi-Hazard Mitigation Plan

The *City of El Segundo Multi-Hazard Mitigation Plan* includes resources and information to assist city residents, public and private sector organizations, and others interested in participating in planning for natural, man-made, and technological hazards. The Mitigation Plan provides a list of activities that may assist the city in reducing risk and preventing loss from future hazard events. The action items address multi-hazard issues, as well as activities for earthquake, flood, windstorm, tsunami, and technological and human-caused hazards. Technological and human-caused hazards (i.e., hazardous materials incidents, transportation accidents, civil unrest, national security emergency, domestic terrorism, and public health emergency) are among the hazards addressed in the Mitigation Plan that are relevant to the Project; refer to Mitigation Plan Section 9.

El Segundo Municipal Code

El Segundo Municipal Code (ESMC) Title 5, Chapter 5, *Hazardous Materials*, is intended to enhance and protect the environmental quality consistent with the Pollution Prevention Act of 1990. Under, Article C, *Hazardous Waste Source Reduction Program*, the purpose is to protect public health and environment and promote the reduction of hazardous waste generation by:

- Effectively regulating hazardous waste generators that generate waste for treatment or disposal off-site
- Educating businesses on source reduction opportunities
- Establishing incentives and disincentives to encourage hazardous waste source reduction

City of El Segundo Fire Department, Environmental Safety Division

The Environmental Safety Division of the City of El Segundo Fire Department (ESFD) is the designated CUPA for the City, which authorizes the City to implement various state environmental programs locally. The programs administered by the ESFD include:

- Hazardous Materials Disclosure – Annual disclosure of chemicals that exceed 55 gallons, 500 pounds, or 200 cubic feet and which are stored or used within a business
- Accidental Release Prevention Program – Requires the development of plans and installation of equipment to reduce the dangers posed by extremely hazardous substances or explosive compounds
- Underground Storage Tank – Inspection of businesses that use underground tanks for storing chemicals or fuels that may leak into groundwater
- Aboveground Tanks – Inspection of petroleum tanks exceeding 1,320 gallons, which may leak into surface waters or ocean
- Hazardous Waste – Regulation of chemicals that are toxic and no longer used by a business (ensures chemical wastes are legally treated or disposed of at permitted facilities)
- International Fire Code – Ensures dangerous chemicals are reported to the California Environmental Reporting System

The following are the reporting requirements for each generator type:

- All generators: Business Activities, Business Owner/Operator Identification; and EPA ID Number
- Small Quantity Generators: Contingency Plan for Small Quantity Generators (only for facilities which do not have any other program elements other than hazardous waste generator) (posted at the facility only)
- Large Quantity Generators: Consolidated Contingency Plan or Contingency Plan from CERS
- On-Site Hazardous Waste Treatment Facilities: Facility Information, Unit Information, Consolidated Contingency Plan or Contingency Plan from CERS, CA and PBR Treatment, Certification of Financial Assurance

5.8.2 Environmental Setting

This section describes the existing hazards and hazardous materials setting for the onshore Project components; the existing offshore Project component (intake tunnel) would not be removed and does not have hazardous materials issues. Potential soil and groundwater contamination conditions beneath the onshore structures are discussed further below in this section. As described in the Project Description, the proposed ocean water desalination facility would be sited within the El Segundo Generating Station (ESGS) facility (North Site or South Site).

North Site

The North Site is an approximate 8-acre area located in the middle of the ESGS property.

Decommissioned Units 3 and 4

The decommissioned power generating Units 3 and 4 are located within the central portion of the North Site (see Figure 3-3). Both of these units were decommissioned in December 2015 (CEC 2015). The structures still remain but all chemicals associated with the operation of the units have been removed. The structures have not been surveyed for hazardous building materials (e.g., asbestos-containing materials [ACM], lead-based paint [LBP], polychlorinated biphenyls [PCBs] in older fluorescent light ballasts, and/or mercury in fluorescent light tubes).

Surface Retention Basins

In 1995, the state of California and DTSC sued Southern California Edison (SCE) for noncompliance with handling hazardous waste. In 1996, SCE implemented a water quality monitoring program in response to a final judgment pursuant to Superior Court of California, Los Angeles County, Stipulation Number 121219, February 1, 1995 (DOJ 1995). The stipulation alleged that SCE had stored hazardous waste in non-permitted wastewater basins at 11 generating stations throughout California, including the two retention basins at the ESGS, also referred to as the Retention Basin and Boiler Chemical Cleaning Basin. SCE agreed to clean the basins in accordance with a Closure Plan (Jamison 2010) approved by the DTSC (DTSC 2010).

The closure of the surface basins was completed in 2015 (Jamison 2015) and approved by the DTSC (2015).

Numerous investigations were conducted over an 18-year period to assess the nature and extent of chemicals released from the retention basins and associated piping (Jamison 2015). The investigations concluded that the use of the retention basins had not resulted in hazardous levels of metals, volatile organic compounds (VOCs), petroleum hydrocarbons, or polynuclear aromatic (PAHs) in groundwater or soils. The human health risk assessment concluded that the residual concentrations of the constituents of potential concern in soil were below industrial/commercial and construction worker risk levels. The investigations also concluded that the petroleum hydrocarbons and VOCs identified in the groundwater throughout the ESGS facility are generally attributed to the petroleum hydrocarbon groundwater plume that has migrated from the Chevron Refinery plume to the east.

Gas Compressor Area

The gas compressor area is located in the southern portion of the North Site, just north of and adjacent to the previously discussed retention basins (see Figure 3-3). As a result of soil investigations, soil was excavated and removed from this area (AECOM 2012). Vanadium and nickel in soil were the chemicals of concern. The removal action resulted in the excavation and removal of about 280 cubic yards of soil, which was sent to an off-site disposal facility permitted to accept the material. Post-excavation verification samples confirmed that the concentrations of vanadium and nickel in remaining soil are below background levels. In addition, four abandoned Chevron pipelines crossing the excavation area, along with 650 pounds of soil, were removed and sent to an off-site disposal facility permitted to accept the material.

South Site

Former Fuel Storage Tanks

The South Site is an approximate 13-acre area and was the previous site for two large aboveground fuel oil storage tanks (ASTs) that were removed in 2011 and 2013 to provide staging/laydown and storage area during construction of Units 5 through 8 (see Exhibit 3-3) (AECOM 2011 and 2013; Leighton 2012). The tank removals are now complete, the site has been capped, and the South Site is used for temporary storage and parking purposes.

In February 2011, soil and groundwater samples were taken from the former northern AST site (on the South Site) and revealed that soils impacted with total petroleum hydrocarbons (TPH) and VOCs are present, but are generally localized at shallow depths below the former AST site with limited vertical migration (AECOM 2011). TPH in the gasoline range was from below detection limits to 130 mg/kg; TPH in the diesel range was from below detection limits to 5,600 mg/kg; TPH in the motor oil range was from below detection limits to 15,000 mg/kg. The Industrial RSLs for TPH as gasoline, diesel, and motor oil are 420, 440, and 33,000 mg/kg, respectively (see Regulatory Framework section for a discussion of screening levels). The Soil ESLs for TPH as gasoline, diesel, and motor oil are 100, 230, and 5,100 mg/kg, respectively. Note that some of the concentrations of TPH as gasoline, diesel, and motor oil exceeded their respective RSLs and ESLs.

Soil and groundwater samples taken from the former southern AST site (on the South Site) revealed that TPH and petroleum-related VOCs are present beneath and immediately adjacent to

the AST footprint (AECOM 2013). Approximately 1,000 cubic yards was estimated to have been impacted with petroleum hydrocarbons in the vicinity of the former tank farm site's southerly fuel oil AST. The more significantly impacted soils are limited to 18 inches below ground surface. TPH in the gasoline range was from below detection limits to 1,350 mg/kg; TPH in the diesel range was from below detection limits to 23,500 mg/kg; TPH in the motor oil range was from below detection limits to 14,200 mg/kg. Note that some of the concentrations of TPH as gasoline, diesel, and motor oil exceeded their respective RSLs and ESLs.

Known Contamination from Off-Site Chevron Refinery

A pool of liquid petroleum hydrocarbons floating on the groundwater was initially reported beneath the northern portion of the ESGS with nearly 2 feet of gasoline measured in 1986 (Jamison 2010). The hydrocarbon layer was also previously detected below the above-discussed retention basins and the source of the hydrocarbons was determined to be leaking gasoline storage tanks on the Chevron Refinery adjacent to the ESGS's eastern boundary.

The groundwater contamination beneath the Chevron facility consists primarily of gasoline, along with other hydrocarbon components. This contamination has been well documented and Chevron is presently under an Order by the Los Angeles RWQCB to remediate the contamination.

Beginning in the late 1980s, Chevron installed remediation systems that included a hydrocarbon vapor recovery system and 20 vapor recovery wells on the ESGS property. One of the extraction wells was immediately adjacent to the wastewater basin's northern dike. There is presently no immiscible (i.e., non-mixing with water) layer of petroleum hydrocarbons below the ESGS property (Trihydro 2017a).

The Chevron Refinery remediation system also includes an injection barrier parallel to Chevron's western property line, approximately 1,500 feet to the east of that property line. The remediation system was installed during the 1990s and has been used intermittently as of the time of retention basin closure plan publication (Jamison 2010). This remedial injection barrier is downgradient of the center of the Chevron property and upgradient of the ESGS wastewater basins. Chevron also operated a line of recovery wells along their western property line, capturing some of the injected water.

Most recently, Chevron is evaluating use of a no-purge well sampling method for their groundwater monitoring program (Trihydro 2016). As a part of this research, two of the sampled wells are located within the ESGS and sample the shallow aquifer, the Old Dune Sand Aquifer. One well (EOW-28) is located within the southwest portion of the North Site along the beach; and one well (MBOW-02) is located within the South Site along the southern border. Total recoverable petroleum hydrocarbons were not detected in groundwater from either well. Low concentrations of methyl tertiary butyl ether (MTBE) and its degradation byproduct tert-butyl alcohol (TBA) were detected in both wells. The concentrations of MTBE ranged from 0.36 to 9.1 ug/L. The MCL for MTBE is 13 ug/L; an MCL has not been established for TBA. Based on these sampling results, the 2016 petroleum hydrocarbon concentrations in groundwater beneath the ESGS that originated from the Chevron Refinery do not exceed drinking water standards. The

2016 annual report for the Chevron Refinery indicates that the current extent of immiscible petroleum hydrocarbons is limited to the refinery property (Trihydro 2017b).

Hazardous Materials Sites near Desalinated Water Conveyance Alignments

Construction activities for the Desalinated Water Conveyance Alignments have the potential to encounter contaminated soil from adjacent active hazardous materials sites. Closed hazardous materials sites are assumed to have undergone remediation such that contaminated soil has been removed or treated to below regulatory action levels. A list of 30 active and open hazardous materials sites organized by street within the proximity of the proposed conveyance pipelines is included in **Appendix 8, Hazardous Materials Sites Near the Ocean Water Desalination Project**.

Proximity to Schools

There are no schools or daycare centers located within one-quarter mile of the ocean water desalination facility, screened ocean intake, and concentrate discharge. Over 40 schools were identified within one-quarter mile of the proposed alignments for the desalinated water conveyance components, including the following:

- El Segundo Pre-School, 301 West Grand Avenue, El Segundo
- St. Michaels Children's Center, 361 Richmond Street, El Segundo
- Happy Baby, 353 Main Street, El Segundo
- El Segundo Cooperative Nursery School, 300 East Pine Avenue, El Segundo
- Hilltop Christian Preschool, 717 East Grand Avenue, El Segundo
- St Anthony Catholic School, 233 Lomita Street, El Segundo
- St Anthony's Preschool, 205 Lomita Street, El Segundo
- El Segundo Middle School, 332 Center Street, El Segundo
- Hawthorne High School, 4859 West El Segundo Boulevard, Hawthorne
- Centinela Valley Union High, 4859 West El Segundo Boulevard, Hawthorne
- Juan De Anza Elementary School, 12110 Hindry Avenue, Hawthorne
- Eucalyptus Elementary School, 12044 Eucalyptus Avenue, Hawthorne
- Hawthorne Math & Science Academy, 4467 W Broadway, Hawthorne
- Hawthorne Middle School, 4366 West 129th Street, Hawthorne
- Ramona Elementary School, 4617 West 136th Street, Hawthorne
- St Joseph's Catholic School, 11886 Acacia Avenue, Hawthorne
- York School, 11838 York Avenue, Hawthorne
- Kornblum School, 3620 W El Segundo Boulevard, Hawthorne
- Prairie Vista South, 13928 Kornblum Avenue, Hawthorne

- Bud Carson Middle School, 13838 Yukon Avenue, Hawthorne
- Kit Carson Elementary School, 3530 West 147th Street, Hawthorne
- Kum Ran Church Pre-School, 3153 Marine Avenue, Gardena
- Alta Vista Innovation High – Gardena, 2401 West Rosecrans Avenue, Gardena
- Southern California Christian Academy, 14509 Spinning Avenue, Gardena
- Gardena's 24/7 Child Care, 2932 W 134th Place, 24/7 KidzHotel, Gardena
- Muir Family Child Care, 13605 Casimir Avenue, Gardena
- Maria Regina School, 13510 Van Ness Avenue, Gardena
- Young Scholars Family Child, 14418 Haas Avenue, Gardena
- Santa Maria Dalila High School, 14424 Van Ness Avenue, Gardena
- Junipero Serra High School, 14830 Van Ness Avenue, Gardena
- Grace Nursery School, 2222 Marine Avenue, Gardena
- Little Peoples Family Day Care, 15119 Atkinson Avenue, Gardena
- Van Ness Preschool, 15408 Van Ness Avenue, Gardena
- Pacific Lutheran High, 2814 Manhattan Beach Boulevard, Gardena
- El Camino College, 16007 Crenshaw Boulevard, Torrance
- Kum Ran Church Pre-School, 3153 Marine Avenue, Gardena
- F. D. Roosevelt Elementary School, 3533 Marine Avenue, Lawndale
- Mark Twain Elementary School, 3728 West 154th Street, Lawndale
- PACE Early Childhood Education, 4130 West 154th Street, Lawndale
- William Anderson Elementary, 4130 West 154th Street, Lawndale
- Will Rogers Middle School, 4110 West 154th Street, Lawndale

Proximity to Airports

The ocean water desalination facility at the ESGS, screened ocean intake, concentrate discharge, and desalinated water conveyance components would be south and outside of the Los Angeles International Airport (LAX) Airport Influence Area, including the runway protection zones (ALUC 2003a).

The ocean water desalination facility at the ESGS, screened ocean intake, and concentrate discharge would be west and outside of the Hawthorne Airport Influence Area, including the runway protection zones (ALUC 2003b). The Hawthorne Airport is also known as Jack Northrop Field. The portion of the desalinated water conveyance components in West 120th Street at and around the intersection with Crenshaw Boulevard is located within the runway protection zone.

Wildland Fires

The California Department of Forestry and Fire Protection (CAL FIRE) maps identify fire hazard severity zones in state and local responsibility areas for fire protection. The ocean water desalination facility at the ESGS, screened ocean intake, concentrate discharge, and desalinated water conveyance components are not located within or near a very high or high fire hazard severity zone (CAL FIRE 2007, 2011).

5.8.3 Significance Thresholds and Criteria

The California Environmental Quality Act Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to hazards and hazardous materials. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section.

Accordingly, the Project would have a significant adverse environmental impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (refer to Impact HAZ 5.8-1).
- 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 (refer to Impact HAZ 5.8-1).
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (refer to Impact HAZ 5.8-2).
- Be located on a site that 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 (refer to Impact HAZ 5.8-3).
- Be located within an area covered by an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, and would result in a safety hazard for people residing or working in the Project area (refer to Impact HAZ 5.8-4).
- Be located within the vicinity of a private airstrip and would result in a safety hazard for people residing or working in the Project area (refer to Impact HAZ 5.8-4).
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (refer to Impact HAZ 5.8-5).
- Expose people or structures, either directly or indirectly, 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 (refer to Impact HAZ 5.8-6).

Potentially Significant Impacts

The environmental factors determined to be potentially affected by the Project, identified in the Notice of Preparation (see Appendix 1A), are analyzed below. Feasible mitigation measures are recommended, where warranted, to avoid or minimize the Project's significant adverse impacts.

5.8.4 Impacts and Mitigation Measures

Routine Use or Accidental Release of Hazardous Materials

Impact HAZ 5.8-1: Would the Project create significant hazard to the public or the environment through the routine use or accidental release of hazardous materials during transport, use, or disposal of hazardous materials?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.8-1** summarizes the impact significance conclusions.

**TABLE 5.8-1
 SUMMARY OF IMPACT HAZ 5.8-1 ROUTINE USE OR ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impacts HAZ 5.8-1: Impacts of routine use of accidental release of hazardous materials.			
Local Project			
Construction	LTSM	LTSM	LTSM
Operation	LTS	LTSM	NI
Regional Project			
Construction	LTSM	LTSM	LTSM
Operation	LTS	LTSM	NI

NOTES:
 NI = No Impact, no mitigation proposed
 LTS = Less than Significant, no mitigation proposed
 LTSM = Less than Significant impact with mitigation

Local Project

Construction-Related Impacts

Ocean Water Desalination Facility – North and South Sites

Local Project ocean water desalination facility demolition and construction activities would require the use of hazardous materials, such as certain construction materials (e.g., fuels, oils and lubricants, paints and thinners, solvents and cleaning agents, degreasers, glues and adhesives, cement and concrete, and asphalt mixtures), all commonly used in the construction industry. Construction of the facility would take place within the confines of the existing ESGS, and transport would be necessary to and from the site. The routine transport, use, storage, and disposal or accidental release of hazardous materials would be required to adhere to federal and state regulations, described in Section 5.8.1 *Regulatory Framework*. Note that if the North Site is selected, the decommissioned Unit 3 and Unit 4 structures would be demolished, requiring the disposal of potentially hazardous building materials (e.g., ACM, LBP, PCBs in fluorescent light ballasts, and/or mercury in fluorescent light tubes, where present). In general, based on the history of the ESGS and the results of the hazardous materials investigations described in the Environmental Setting for localized areas within the ESGS facility (North and South Sites), including the desalinated water conveyance facilities within the ESGS facility, residual

contamination may be encountered in soil and/or groundwater during excavation activities (e.g., if the South Site is selected, residual contamination may be encountered in soil beneath the former fuel storage tanks).

To reduce the impact from the generation of waste to less than significant, **Mitigation Measure HAZ-1** would require implementation of a Waste Management Plan for all hazardous and non-hazardous waste generated during facility construction and demolition activities. The Waste Management Plan would describe waste management procedures and all construction aspects of the components of the ocean water desalination facility (North and South Sites), the screened ocean intake and concentrate discharge improvements, and the desalinated water conveyance components.

In addition, **Mitigation Measure HAZ-2** would require each construction contractor that would have workers on-site prepare and implement a Demolition and Construction Health and Safety Plan.

Compliance with the existing federal and state regulations and implementation of Mitigation Measures HAZ-1 and HAZ-2 would ensure that impacts associated with the handling, storage, transportation, and disposal of hazardous materials during construction would be less than significant.

Screened Ocean Intake and Concentrate Discharge

The Local Project screened ocean intake and concentrate discharge construction would require use of hazardous materials, such as the standard construction materials noted above, along with marine fuel. To reduce the potential for spills on marine fuel and oil during marine construction operations, **Mitigation Measure HAZ-3** would require the preparation of an Anchoring Plan to ensure marine vessels are moored effectively and safely, **Mitigation Measure HAZ-4** would cover safety measures needed for marine construction activities, **Mitigation Measure HAZ-5** would require West Basin to prepare an Oil Spill Response Plan to ensure the effective remediation of any accidental releases of hazardous materials into the ocean during construction, and **Mitigation Measure HAZ-6** would outline safety measures for underwater construction activities.

Through compliance with existing federal and state regulations and implementation of Mitigation Measures HAZ-1 through HAZ-6, impacts associated with the handling, storage, transportation, and disposal of hazardous materials during construction would be less than significant.

Desalinated Water Conveyance Components

Similar to the construction activities analyzed above under the ocean water desalination facility discussion, desalinated water conveyance construction would require the use of hazardous materials. Please refer to the analysis above, which concludes that through compliance with existing federal and state regulations intended to minimize potential health risks associated with hazardous materials, and the implementation of Mitigation Measures HAZ-1 and HAZ-2, impacts associated with the handling, storage, transportation, and disposal of hazardous materials during construction would be less than significant.

Mitigation Measures:

Mitigation Measures HAZ-1 and HAZ-2 would be required for construction-related impacts to the ocean water desalination facility and desalinated water conveyance components. Mitigation Measures HAZ-3 through HAZ-6 would be required for construction-related impacts to the intake and discharge facilities.

Local Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Operations of the Local Project ocean water desalination facility would involve the use and storage of materials/chemicals common and typical for water treatment facilities. These chemicals, which could be required for control of biological fouling, pretreatment, membrane cleaning, and post-treatment, are listed in Table 3-2 in Section 3, Project Description.

Bulk chemicals would be stored in gaseous form (carbon dioxide), solid form (calcite), and liquid form (all other chemicals). All chemicals would be stored in accordance with applicable regulations that ensure safety. They would be stored in bulk on-site in the Chemical/Residuals Handling Building with the exception of clean-in-place chemicals, which would be stored within the Pretreatment (i.e., Membrane Filtration) Building and Reverse Osmosis Buildings (see Figures 3-9 through 3-10). The bulk storage systems would be designed to provide 10 to 20 days of storage at average dosage rates. The bulk storage container would vary according to chemical, and would include small drums and totes (less than 200 gallons), fixed tanks and bins (1,000 to 15,000 gallons each), and mobile (trailer-mounted) horizontal tanks (up to 7,500 gallons each). Each bulk liquid chemical storage area would be equipped with a separate chemical spill containment area for each chemical capable of containing 110 percent of the maximum amount of that liquid chemical stored on-site. Chemical transport is subject to state and federal requirements to ensure safety.

Hazardous materials could be released accidentally and could expose people and/or the environment to hazardous conditions. As required by the HMBP Program, West Basin would be required to prepare and implement an HMBP to describe procedures and protocols for the safe storage, handling, transport, and disposal of hazardous materials. The HMBP would be submitted to the local CUPA—the ESFD Environmental Safety Division—or their review and approval. In addition, West Basin (or its designee) would be required to obtain a hazardous waste generator identification number from the DTSC prior to generating any hazardous waste.

Compliance with all applicable federal and state regulations would ensure that impacts associated with the handling, storage, transportation, and disposal of hazardous materials during operations would be less than significant.

Screened Ocean Intake and Concentrate Discharge

Operation of the Local Project intake and discharge facilities would not involve transport, storage, or disposal of hazardous materials in the marine environment. Routine in-pipe chlorination of the intake tunnel may be needed to prevent excessive biofouling causing restricted

flow. However, the chlorinated water would not discharge to the ocean, but rather would be collected and treated and dechlorinated.

Intake screens would also be required to be inspected by divers to ensure that excessive biofouling is not developed. Should macro foulants be found, divers would use tools, such as brushes and chisels, to mechanically remove large foulants attached to the screens. Such routine inspection and maintenance work would require a small crew (up to 5 people). To reduce the potential for spills on marine fuel and oil during underwater inspection and maintenance work, Mitigation Measure HAZ-3 would require the preparation of an Anchoring Plan to ensure marine vessels are moored effectively and safely, Mitigation Measure HAZ-4 would cover safety measures needed for the underwater inspection and maintenance activities, Mitigation Measure HAZ-5 would require West Basin to prepare an Oil Spill Response Plan to ensure the effective remediation of any accidental releases of hazardous materials into the ocean during underwater inspection and maintenance, and Mitigation Measure HAZ-6 would outline safety measures for underwater inspection and maintenance activities.

Through compliance with existing federal and state regulations and implementation of Mitigation Measures HAZ-3 through HAZ-6, impacts associated with the handling, storage, transportation, and disposal of hazardous materials during operational phase would be less than significant.

Desalinated Water Conveyance Components

Local Project desalinated water conveyance components would transport the treated water produced at the ocean water desalination facility to the existing West Basin distribution system. There would be no impact associated with water conveyance.

Mitigation Measures:

Mitigation Measures HAZ-3 through HAZ-6 would be required for operational impacts related to inspection and maintenance of the intake and discharge facilities.

Local Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Regional Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Construction-related impacts of the Regional Project would be similar to the Local Project. Implementation of HAZ-1 and HAZ-2 would ensure that impacts associated with the use of hazardous materials would be less than significant.

Screened Ocean Intake and Concentrate Discharge

Construction-related impacts of the Regional Project would be similar to the Local Project. Implementation of HAZ-3 through HAZ-6 would ensure that impacts associated with the use of hazardous materials would be less than significant.

Desalinated Water Conveyance Components

Construction-related impacts of the Regional Project would be similar to the Local Project. Implementation of HAZ-1 and HAZ-2 would ensure that impacts associated with the use of hazardous materials would be less than significant.

Mitigation Measures:

Mitigation Measures HAZ-1 and HAZ-2 would be required for construction-related impacts to the ocean water desalination facility and desalinated water conveyance components. Mitigation Measures HAZ-3 through HAZ-6 would be required for construction-related impacts to the intake and discharge facilities.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Operation of the Regional Project would be similar to the Local Project. Compliance with federal and state regulations would ensure that impacts associated with the storage, transport, and disposal of hazardous materials would be less than significant.

Screened Ocean Intake and Concentrate Discharge

Operational impacts of the Regional Project would be similar to the Local Project. Implementation of HAZ-3 through HAZ-6 would ensure that impacts associated with the use of hazardous materials would be less than significant.

Desalinated Water Conveyance Components

Operation of the Regional Project would be similar to the Local Project. There would be no impact associated with water conveyance.

Mitigation Measures:

Mitigation Measures HAZ-3 through HAZ-6 would be required for operational impacts related to inspection and maintenance of the intake and discharge facilities.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Mitigation Measures:

The following mitigation measures apply to both the Local and Regional Projects, unless otherwise noted.

HAZ-1: No less than 30 days prior to site disturbance activity (North Site or South Site), West Basin (or its designee) shall prepare and submit a Waste Management Plan to the DTSC and the ESFD (the local CUPA) for their review and approval, and to other local agencies, if applicable, for review and comment. The Waste Management Plan shall include, but not be limited to, the following:

- A description of all waste streams, including projections of frequency, amounts generated, and hazard classifications; methods of managing each waste, including storage, treatment methods, and companies contracted with for treatment services; waste testing methods to ensure correct classification: methods of transportation, disposal requirements and disposal sites: and recycling and waste minimization/reduction plans.
- Procedures for managing excavated soil, which may contain residual chemicals such as gasoline that migrated from the adjacent Chevron Refinery (either the North Site or South Site), chemicals from the ESGS operation, and/or fuel from the former fuel storage tanks (South Site). The procedures shall include the designation of a state-registered Professional Engineer or Professional Geologist to oversee soil excavation and, if necessary, investigation and cleanup in the event that contamination is encountered; sampling procedures to assess the nature and extent of contamination; and reporting and notification requirements.
- Procedures for managing groundwater generated from dewatering activities, which may encounter groundwater contaminated with residual chemicals that migrated from the adjacent Chevron Refinery (either the North Site or South Site), chemicals from the ESGS operation, and/or fuel from the former fuel storage tanks (South Site). The procedures shall include the designation of a state-registered Professional Engineer or Professional Geologist to oversee dewatering activities and if necessary, investigation and cleanup in the event that contamination is encountered; sampling procedures to assess the nature and extent of contamination; and reporting and notification requirements.
- If the North Site is selected, the Waste Management Plan shall include a work plan for conducting a hazardous building materials survey of the Unit 3 and Unit 4 structures to be demolished and removed. The materials to be surveyed shall include but not be limited to ACM, LBP, PCBs in fluorescent light ballasts, and/or mercury in fluorescent light tubes.
- If the North Site is selected, the Waste Management Plan shall include a description of the berm or other structures around Units 3 and 4 to prevent runoff.

HAZ-2: The construction contractor(s) shall prepare and implement site-specific Project Demolition and Construction Health and Safety Plans as required by and in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation, grading, construction, and demolition activities. This Health and Safety Plan shall be submitted to West Basin and the ESFD Environmental Safety Division for review prior to commencement of construction. The Health and Safety Plan shall include, but is not limited to, the following elements:

- Designation of a trained, experienced site safety and health supervisor who has the responsibility and authority to develop and implement the site Health and Safety Plan.
- A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals.
- Specified personal protective equipment and decontamination procedures, if needed.
- Emergency procedures, including directions to the nearest hospital.

- Procedures to be followed in the event that evidence of potential soil or groundwater contamination (such as soil staining, noxious odors, debris, or buried storage containers) is encountered. These procedures shall be in accordance with hazardous waste operations regulations and specifically include, but are not limited to, the following: immediately stopping work in the vicinity of the unknown hazardous materials release; notifying ESFD Environmental Safety Division, the DTSC, or Los Angeles RWQCB, as appropriate; and retaining a qualified environmental firm to perform sampling and remediation.

HAZ-3: West Basin shall prepare an Anchoring Plan that applies to all ships, barges, and other ocean-going vessels and describes procedures for deploying, using, and recovering anchorages. The Anchoring Plan shall include, but not be limited to, the following elements:

- A brief overview of the Project objectives.
- Description of anchor set and anchor leg (wires, winches, and other support equipment).
- Description of vessels to be anchored and support tugs to be used.
- Description and delineation of safety zone and anchor zone, including identification and mapping all areas of kelp, seagrasses, and hard substrate found within the work area.
- Identification of Contractor Vessels and Buoys, including daylight and nighttime marking schemes.
- Anchoring procedures.
- Local notice to U.S. Coast Guard and mariners.

All elements of the Anchoring Plan shall be in compliance with U.S. Coast Guard regulations.

HAZ-4: The Marine Safety Plan would apply to all marine construction activities that would take place for the improvements to the screened ocean intake and concentrate discharge pipes. The purpose would be to provide a precise set of procedures and protocols that will be used by the marine contractors during the marine portions of the construction work, with a focus on personal, environmental, and vessel safety. The Marine Safety Plan shall include, but not be limited to, the following elements:

- A brief overview of the Project objectives.
- Distribution of Marine Safety Plan, which shall include the U.S. Coast Guard, each vessel involved in the marine activities, all environmental monitors, and all support radio operators.
- Training for the Project manager for marine activities, vessel operators, field supervisors, and environmental monitors.
- Description of marine Project location.
- Description of marine operations protocols.
- Description of critical operations and curtailment plan, including offshore fueling procedures and storm procedures.

- Marine communications plan.
- Marine transportation plan for barges, tugboats, crewboats, and other vessels.
- Navigational marking and lighting plan.

All elements of the Marine Safety Plan shall be in compliance with U.S. Coast Guard regulations.

HAZ-5: West Basin shall prepare a Marine Oil Spill Response Plan that would apply to all powered vessels used in support of the screened ocean intake and concentrate discharge construction activities. The purpose would be to provide a precise set of procedures and protocols that would be utilized in the event of an offshore fuel, oil, or hazardous materials spill resulting from construction activities (e.g., marine fuel and oil). The Marine Oil Spill Response Plan shall include but not be limited to the following elements:

- A brief overview of the Project objectives.
- Definition of major and minor spills.
- Description of spill sources.
- Description of spill response team and equipment.
- Notification requirements, including names and phone numbers of agencies to be notified, along with an information checklist of the incident.
- Description of marine spill scenarios and response procedures.

All elements of the Oil Spill Response Plan shall be in compliance with U.S. Coast Guard regulations.

HAZ-6: The Diver Safety Plan would apply to all construction activities that require the use of divers. The purpose would be to provide a precise set of procedures and protocols that will be used by the marine contractors during the marine portions of the construction work that require divers, with a focus on personal safety. The Diver Safety Plan shall include, but not be limited to, the following elements:

- A brief overview of the Project objectives.
- A description of the diving techniques and equipment that will be used to support the underwater work activities. This section will also include a description of the procedures that will be used to perform each underwater operation.
- A description of the job safety analysis tool that will be used to prepare for each day's diving operations.
- An evacuation plan for evacuating injured divers.
- A contact list for local emergency services organizations and facilities.
- Incorporation of U.S. Coast Guard and Occupational Safety and Health Administration (OSHA) safety regulations.

Schools

Impact HAZ 5.8-2: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.8-2** summarizes the impact significance conclusions.

**TABLE 5.8-2
 SUMMARY OF IMPACT HAZ 5.8-2 HAZARDOUS MATERIALS NEAR SCHOOLS**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact HAZ 5.8-2: Impacts on hazardous materials near schools.			
Local Project			
Construction	NI	NI	LTSM
Operation	NI	NI	NI
Regional Project			
Construction	NI	NI	LTSM
Operation	NI	NI	NI

NOTES:

NI = No Impact, no mitigation proposed
 LTSM = Less than Significant impact with mitigation

Local Project

Construction-Related Impacts

Ocean Water Desalination Facility - ESGS North and South Sites

Construction activities would not emit or handle hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of a proposed school. Onshore construction activities for the Local Project ocean water desalination facility would occur within the confines of the ESGS. The nearest school (Beach Babies daycare facility), located at 540 Rosecrans Avenue, Manhattan Beach, is approximately 0.54 miles southeast of the ESGS. No impact would occur.

Screened Ocean Intake and Concentrate Discharge

The Local Project screened ocean intake and concentrate discharge construction would not emit or handle hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of a proposed school. No impact would occur.

Desalinated Water Conveyance Components

Numerous schools are located within one-quarter mile of the Local Project desalinated water conveyance components, which would be installed within existing right-of-way (ROW) in areas

that are surrounded by urban development. Local Project desalinated water conveyance construction could require limited amounts of some hazardous materials, including standard construction materials, vehicle fuel, and other hazardous materials. Compliance with existing federal and state regulations and implementation of HAZ-1 and HAZ-2 would ensure that construction of the conveyance system facilities result in less than significant impacts.

Mitigation Measures:

Mitigation Measures HAZ-1 and HAZ-2 would be required for impacts to the desalinated water conveyance components. No mitigation is required for the ocean water desalination facility or the intake and discharge facilities.

Local Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Operation of the Local Project ocean water desalination facility would not emit or handle hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of a proposed school. Onshore construction activities for the Local Project ocean water desalination facility would occur within the confines of the ESGS. The nearest school (Beach Babies daycare facility), located at 540 Rosecrans Avenue, Manhattan Beach, is situated approximately 0.54 miles southeast of the ESGS. No impact would occur.

Screened Ocean Intake and Concentrate Discharge

Operation of the Local Project would not affect schools. No impact would occur.

Desalinated Water Conveyance Components

Once constructed, the underground water conveyance system would not impact local schools. No impact would occur.

Mitigation Measures:

None Required.

Local Project Significance Determination:

No Impact.

Regional Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

The Regional Project would be similar to the Local Project. Construction activities would occur within the ESGS. The nearest school (Beach Babies daycare facility), located at 540 Rosecrans Avenue, Manhattan Beach, is situated approximately 0.54 miles southeast of the ESGS.

Therefore, no impact would occur.

Screened Ocean Intake and Concentrate Discharge

The Regional Project would be similar to the Local Project. No impact would occur.

Desalinated Water Conveyance Components

Similar to the Local Project, numerous schools are located within one-quarter mile of the Regional Project desalinated water conveyance components, including the regional pump station. Construction of the Regional Project could result in accidental release of hazardous materials during construction. Exposure to contaminated materials is considered a potentially significant impact as it could expose receptors near schools to hazardous materials. Compliance with existing federal and state regulations and implementation of Mitigation Measures HAZ-1 and HAZ-2 would ensure that potential impacts would be less than significant.

Mitigation Measures:

Mitigation Measures HAZ-1 and HAZ-2 would be required for construction-related impacts to the desalinated water conveyance components. No mitigation is required for the ocean water desalination facility or the screened ocean intake.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

All Project Components

Operation of the Regional Project would be similar to the Local Project. No impacts would occur.

Mitigation Measures:

None Required.

Regional Project Significance Determination:

No Impact.

Hazardous Materials Sites

Impact HAZ 5.8-3: Would the Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.8-3** summarizes the impact significance conclusions.

Local Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

The Local Project ocean water desalination facility would be sited within the confines of the ESGS, which is listed on the Cortese list (Government Code Section 65962.5). Please refer to

Impact HAZ 5.8-1 for the analysis, which concluded that with compliance with existing regulations and the implementation of Mitigation Measures HAZ-1 and HAZ-2, the impacts would be less than significant.

Screened Ocean Intake and Concentrate Discharge

The screened ocean intake and concentrate discharge components are not located on a listed hazardous materials site. No impact would occur.

**TABLE 5.8-3
 SUMMARY OF IMPACT HAZ 5.8-3 HAZARDOUS MATERIALS SITES**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact HAZ 5.8-3: Impacts on hazardous materials sites.			
Local Project			
Construction	LTSM	NI	LTSM
Operation	NI	NI	NI
Regional Project			
Construction	LTSM	NI	LTSM
Operation	NI	NI	NI
NOTES: NI = No Impact, no mitigation proposed LTSM = Less than Significant impact with mitigation			

Desalinated Water Conveyance Components

As discussed in Section 5.8.2 *Environmental Setting*, there are numerous active, inactive, and closed hazardous materials sites adjacent to sections of the desalinated water conveyance components. Contamination from these sites may extend to soil beneath the streets where the pipelines would be installed. The construction activities may encounter contaminated soil. Please refer to Impact HAZ 5.8-1 for the analysis, which concluded that with compliance with existing regulations and the implementation of Mitigation Measures HAZ-1 and HAZ-2, the impacts would be less than significant.

Mitigation Measures:

Mitigation Measures HAZ-1 and HAZ-2 would be required for construction-related impacts to the ocean water desalination facility and the desalinated water conveyance components. No mitigation is required for construction of the screened ocean intake.

Local Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility - ESGS North and South Sites

Once installed, the ocean water desalination facility would no longer encounter contamination from underlying soil and groundwater, and there would be no impact.

Screened Ocean Intake and Concentrate Discharge

The screened ocean intake and concentrate discharge components are not located on a listed hazardous materials site. No impact would occur.

Desalinated Water Conveyance Components

Once installed, the desalinated water conveyance components would no longer encounter contamination from underlying soil and there would be no impact.

Mitigation Measures:

None Required.

Local Project Significance Determination:

No Impact.

Regional Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

The Local and Regional Projects involve the same onshore development footprints (ESGS property) for the ocean water desalination facility, screened ocean intake, and concentrate discharge structures. Please refer to Impact HAZ 5.8-1 for the analysis, which concluded that with compliance with existing LORS and the implementation of Mitigation Measures HAZ-1 and HAZ-2, the impacts would be less than significant.

Screened Ocean Intake and Concentrate Discharge

The screened ocean intake and concentrate discharge components are not located on a listed hazardous materials site. No impact would occur.

Desalinated Water Conveyance Components

As discussed in Section 5.8.2 *Environmental Setting*, there are numerous active, inactive, and closed hazardous materials sites adjacent to sections of the desalinated water conveyance components. Contamination from these sites may extend to soil beneath the streets where the pipelines would be installed. The construction activities may encounter contaminated soil. Please refer to Impact HAZ 5.8-1 for the analysis, which concluded that with compliance with existing regulations and the implementation of Mitigation Measures HAZ-1 and HAZ-2, the impacts would be less than significant.

Mitigation Measures:

Mitigation Measures HAZ-1 and HAZ-2 would be required for construction-related impacts to the ocean water desalination facility and the desalinated water conveyance components. No mitigation is required for construction of the screened ocean intake.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility - ESGS North and South Sites

Once installed, the ocean water desalination facility would no longer encounter contamination from underlying soil and groundwater, and there would be no impact.

Screened Ocean Intake and Concentrate Discharge

The screened ocean intake and concentrate discharge components are not located on a listed hazardous materials site. No impact would occur.

Desalinated Water Conveyance Components

Once installed, the desalinated water conveyance components would no longer encounter contamination from underlying soil and there would be no impact.

Mitigation Measures:

None Required.

Regional Project Significance Determination:

No Impact.

Public and Private Airports

Impact HAZ 5.8-4: Would the Project be located within an area covered by an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, public use airport, or private and would result in a safety hazard for people residing or working in the Project area?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.8-4** summarizes the impact significance conclusions.

**TABLE 5.8-4
 SUMMARY OF IMPACT HAZ 5.8-4 PUBLIC AND PRIVATE AIRPORTS**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact HAZ 5.8-4: Impacts on public and private airports.			
Local Project			
Construction	NI	NI	NI
Operation	NI	NI	NI
Regional Project			
Construction	NI	NI	NI
Operation	NI	NI	NI
NOTES: NI = No Impact, no mitigation proposed			

Local and Regional Projects

Construction-Related and Operation Impacts

All Project Components

As discussed in the Environmental Setting, none of the Project components are located within the LAX Airport Influence Area. Therefore, construction and operation of the Project components would not result in an airport-related safety hazard relative to LAX and there would be no impact.

As discussed in the Environmental Setting, a portion of the desalinated water conveyance components in West 120th Street at and around the intersection with Crenshaw Boulevard is located within the RPZ. However, the activities that would be conducted at this location would consist of trenching equipment and support vehicles to install the underground pipeline. The equipment and vehicles would not be any higher than the surrounding existing buildings or vehicles that currently use West 120th Street. Therefore, there would be no conflict with aircraft landing or taking off from the Hawthorne Airport. The Project would not result in an airport-related safety hazard and there would be no impact.

Mitigation Measures:

None Required.

Local and Regional Project Significance Determination:

No Impact.

Emergency Response

Impact HAZ 5.8-5: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project

components for both the Local and Regional Projects. **Table 5.8-5** summarizes the impact significance conclusions.

Local Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

The El Segundo General Plan Public Health and Safety Element states that it is the City’s goal to periodically review and reevaluate their Emergency Operations Plan, to ensure adequate evacuation routes and street widths, emergency services, equipment, shelters, and all other major needs that could arise in the event of a disaster. The El Segundo General Plan does not identify primary evacuation routes within the city. However, Rosecrans Boulevard (approximately 1.6 miles away) and Grand Avenue (approximately 0.9 miles away) are major arterial streets and would be used by persons evacuating the desalination facility site in the event of an emergency. Construction of the Local Project ocean water desalination facility would result in minor amounts of construction traffic that would not substantially impede access along any of these roadways during construction, thus resulting in a less than significant impact.

**TABLE 5.8-5
 SUMMARY OF IMPACT HAZ 5.8-5 EMERGENCY RESPONSE**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impacts HAZ 5.8-5: Impacts on emergency response.			
Local Project			
Construction	LTS	LTS	LTSM
Operation	NI	LTS	NI
Regional Project			
Construction	LTS	LTS	LTSM
Operation	NI	LTS	NI

NOTES:

- NI = No Impact, no mitigation proposed
- LTS = Less than Significant, no mitigation proposed
- LTSM = Less than Significant impact with mitigation

Screened Ocean Intake and Concentrate Discharge

Installation of the Local Project screened ocean intake and concentrate discharge facilities would occur entirely within the ESGS facility. The minor amount of construction traffic would not require any lane closures and therefore would not substantially impede evacuation routes, thus resulting in a less than significant impact.

Desalinated Water Conveyance Components

Local Project desalinated water conveyance components construction would occur within roadway ROWs and could result in single-lane closures during construction. The single-lane closures would be temporary and would not obstruct emergency traffic from going around the construction zone. In addition, Mitigation Measure TRA-1, as discussed within Section 5.14,

Transportation and Traffic, requires preparation of a Traffic Control Plan and implementation program that would ensure access for emergency vehicles to the Project site, as well as temporary travel lane closure. Thus, the temporary nature of the installation activities related to the Local Project desalinated water conveyance pipelines, as well as implementation of Mitigation Measure TRA-1, would ensure that the Project impacts concerning potential interruptions to an adopted emergency response plan are less than significant.

Mitigation Measures:

No mitigation measures are required for construction impacts to the ocean water desalination facility or the intake and discharge facilities. Implement Mitigation Measure TRA-1 for impacts to the desalinated water conveyance components.

Local Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Local Project ocean water desalination facility operation would occur entirely within the ESGS facility and would not result in the impediment of access along any of the major roadways in the vicinity. The Project would retain the existing emergency access gate adjacent to the Marvin Braude Coastal Bike Trail. The volume of operations traffic would be negligible. No impact would occur.

Screened Ocean Intake and Concentrate Discharge

Onshore operation activities for the Local Project screened ocean intake and concentrate discharge would occur entirely within the ESGS and below the ocean. Emergency services would be provided by the US Coast Guard. Impacts would be less than significant.

Desalinated Water Conveyance Components

The desalinated water conveyance components proposed under the Local Project would be located underground within the ROW of the affected roadways. The subterranean nature of these components would ensure daily operation activities would not disrupt or interfere with emergency access. No impacts would occur.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

The Local and Regional Projects involve the same ocean water desalination facility development footprints (ESGS North and South Sites). Therefore, as with the Local Project, construction of a

Regional Project ocean water desalination facility would not substantially impede access along any of these roadways during construction. A less than significant impact would occur.

Screened Ocean Intake and Concentrate Discharge

The Local and Regional Projects involve the same screened ocean intake and concentrate discharge construction footprints. Therefore, as with the Local Project, construction of the Regional Project screened ocean intake and concentrate discharge would not require any lane closures and therefore would not substantially impede evacuation routes, resulting in a less than significant.

Desalinated Water Conveyance Components

The Regional Project desalinated water conveyance components would be installed within roadway ROWs and could result in single-lane closures during construction. The single-lane closure is not anticipated to be required; partial lane closures would be temporary and would not obstruct emergency traffic from going around the construction zone. In addition, installation activities for the Regional Project desalinated water conveyance components would also be subject to Mitigation Measure TRA-1, to require the preparation of a Traffic Control Plan and implementation program that would ensure access for emergency vehicles to the Project site, as well as temporary travel lane closure. The temporary nature surrounding Project construction, as well as compliance with Mitigation Measure TRA-1, would ensure impacts related to the impediment of access along any of the major roadways in the vicinity of the Project are less than significant.

Mitigation Measures:

No mitigation measures are required for construction impacts to the ocean water desalination facility or the screened ocean intake and concentrate discharge. Implement Mitigation Measure TRA-1 for impacts to the desalinated water conveyance components.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

The Regional Project ocean water desalination facility would operate entirely within the ESGS and would not result in the impediment of access along any of the major roadways in the vicinity. The volume of operations traffic would be negligible. No impact would occur.

Screened Ocean Intake and Concentrate Discharge

Operation of the Regional Project intake and discharge facility would not impede access along any of the major roadways in the vicinity. Emergency services offshore would be provided by the US Coast guard. Impacts would be less than significant.

Desalinated Water Conveyance Components

The desalinated water conveyance components proposed under the Regional Project would be located underground within the ROW of the affected roadways. The subterranean nature of these

components would ensure daily operation activities would not disrupt or interfere with emergency access. No impacts would occur.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Wildland Fires

Impact HAZ 5.8-6: Would the Project 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?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.8-6** summarizes the impact significance conclusions.

**TABLE 5.8-6
 SUMMARY OF IMPACT HAZ 5.8-6 WILDLAND FIRES**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impacts HAZ 5.8-6: Impacts on wildland fires.			
Local Project			
Construction	NI	NI	NI
Operation	NI	NI	NI
Regional Project			
Construction	NI	NI	NI
Operation	NI	NI	NI

NOTES:

NI = No Impact, no mitigation proposed

Local and Regional Project

Construction-Related and Operational Impacts

All Project Components

Both the Local and Regional Projects are located in an urbanized area and are not located adjacent to wildlands; therefore, construction and operation would not expose people or structures to a significant risk involving wildland fires. No impact would occur.

Mitigation Measures:

None Required.

Local and Regional Project Significance Determination:

No Impact.

5.8.5 Cumulative Impacts

For purposes of this analysis, the geographic scope of the cumulative analysis includes the coastal communities along the Santa Monica Bay. Refer also to Section 4, *Cumulative Impacts*, for discussion concerning the basis for the cumulative impact analysis and a list of related cumulative projects located in the Project vicinity.

The Project area is located in an historic industrial zone that includes the adjacent Chevron Refinery that has contributed to groundwater contamination, including underlying the ESGS (proposed ocean water desalination facility) site. Project implementation is not expected to cumulatively contribute to the groundwater contamination in the area following compliance with federal, state, and local laws and regulations, as well as implementation of specified Mitigation Measures HAZ-1 and HAZ-2, which would minimize worker exposure to contaminated soil and/or groundwater during construction such that proposed workers and the public occupying the Project site would not be exposed to substantial risk involving soils, soil gas, and groundwater at the Project site. Mitigation Measure TRA-1 would ensure the Project's construction-related impacts to an adopted emergency response plan are less than significant through implementation of a Traffic Control Plan. Cumulative development would be subject to the numerous existing federal, state, regional, and local laws, ordinances, regulations, and standards in place to minimize and/or avoid the effects of past, current, and probable development. Thus, Project implementation would not result in a cumulatively considerable contribution to impacts concerning hazards and hazardous materials following compliance with federal, state, and local laws and regulations, as well as Mitigation Measures HAZ-1, HAZ-2, and TRA-1.

5.8.6 Significant Unavoidable Impacts

No significant unavoidable impacts to hazards and hazardous materials have been identified following implementation of Mitigation Measures HAZ-1 through HAZ-6, and TRA-1.

5.8.7 References

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Trihydro, 2017a, Liquid Hydrocarbon Recovery Project, Annual Report for 2016, Chevron Products Company, El Segundo Refinery, El Segundo, California, February 15.

Trihydro, 2017b, Results of the Chevron Products Company El Segundo Refinery Liquid Hydrocarbon Recovery Project, April 2017 Semiannual Sampling Event, August 15.