3.7

HAZARDS AND HAZARDOUS MATERIALS

3.7

HAZARDS AND HAZARDOUS MATERIALS

3.7.1 Introduction

This section addresses hazards and hazardous materials, including existing hazardous conditions, applicable regulations, and the potential impacts on sensitive receptors associated with the proposed Project. Additionally, this section discusses the potential hazards and hazardous materials impacts that could be introduced by the proposed Project that could have an adverse effect on public health and safety. These potential impacts include fires, explosions, and releases of hazardous materials, as well as the environmental consequences of terrorism actions, associated with construction and operation of the proposed facilities. For impacts associated with known or suspected soil or groundwater contamination in the area of the proposed Project, please refer to Section 3.6, "Groundwater and Soils." For impacts associated with health risks from air contaminants please refer to Section 3.2, "Air Quality and Greenhouse Gases."

The impact analysis determined that construction and operation of the proposed Project would result in less-than-significant impacts as a result of non-compliance with federal, state, regional, and local security and safety regulations, as well as emergency response or evacuation plans. Also, the proposed Project would not result in public health and safety concerns as a result of the accidental release, spill, or explosion of hazardous materials due to a tsunami, an accidental spill, release, or explosion of hazardous material(s) due to a terrorist action or as a result of proposed project activities. Mitigation Measure MM RISK-1 would be required to reduce hazards-related changes that could introduce the general public to hazard(s) defined by the EPA and the Port RMP associated with offsite facilities to a level below significance.

3.7.2 Environmental Setting

3.7.2.1 Hazardous Materials

Hazardous materials are generally the raw materials for a product or process that may be classified as toxic, flammable, corrosive, or reactive. Hazardous materials that may be stored, handled, or transported within the study area are classified by the following:

- corrosive materials—solids, liquids, or gases that can damage living material or cause fire;
- explosive materials—any compound that is classified by the National Fire Protection Association (NFPA) as an A, B, or C explosive;
- oxidizing materials—any element or compound that yields oxygen or reacts when subjected to water, heat, or fire conditions;
- toxic materials—gases, liquids, or solids that may create a hazard to life or health by ingestion, inhalation, or absorption through the skin;
- unstable materials—those materials that react from heat, shock, friction, contamination, etc., and are capable of violent decomposition or autoreaction but are not designed primarily to be explosives;
- radioactive materials—those materials that undergo spontaneous emission of radiation from decaying atomic nuclei; and
- water-reactive materials—those materials that react violently or dangerously upon exposure to water or moisture.

3.7.2.2 Existing Onsite Operational Hazards

Within the proposed project site, the Westways Terminal comprises 14.3 acres located at Berths 70–71 on Signal Street. The site contains 134 liquid bulk storage tanks and appurtenant facilities. In 2009, the Westways facility was closed, and decommissioning of the storage tanks was approved by the Board of Harbor Commissioners pursuant to LAHD's RMP. When in operation, the terminal was served by rail, truck, and ship and handled oils, lubricant base, fuel additives, glycols, ketones, acetates, and phthalates, which are chemical compounds commonly used in manufacturing. Remediation planning and investigations are ongoing to determine the requirements for demolition and cleanup of the facility. See Section 3.6, "Groundwater and Soils," for a description of the remediation actions that were previously analyzed in the 2009 San Pedro Waterfront EIS/EIR.

3.7.2.3 Offsite Operational Hazards

Mike's Main Channel (Mike's) fueling station is located at Berth 72 just north of the Westways Terminal and south of the Municipal Fish Market, adjacent to the proposed project site. Mike's occupies less than 1 acre, including waterfront and wharf, and currently has five aboveground storage tanks, with capacities ranging from 500 to 200,000 gallons. The existing operations provide fuel to recreational boaters within Los Angeles Harbor. Mike's fueling station, which employs two people, handles clear diesel, lube oil, red dye diesel, and waste lube oil.

Since Mike's fueling station currently handles and stores hazardous materials, defined by LAHD as materials with flashpoints below 140 degrees Fahrenheit (°F), it has an existing hazardous footprint per the RMP. However, the RMP does not identify any currently existing vulnerable resources within the vicinity of the existing hazardous materials footprint for Mike's fueling station. As part of the San Pedro

Waterfront Project, the waterfront promenade was approved to be extended adjacent to Mike's with the condition that hazardous materials with flashpoints below 140°F be removed from the facility prior to operation of the waterfront promenade at this location (see Mitigation Measure MM RISK-1 in the San Pedro Waterfront EIR). LAHD provided a letter to Mike Albano (operator of Mike's) dated June 16, 2008, regarding the successor permit to revocable permit (RP) No. 98-14, which stated that products with a flashpoint (i.e., the temperature at which a particular organic compound gives off sufficient vapor to ignite in air) below 140°F will not be permitted within the project area (i.e., San Pedro Waterfront Project area). The successor permit to RP No. 98-14 to allow the operation for Mike's fueling station and continued lease of Mike's fueling station will only allow handling of products above said threshold.

3.7.2.4 Existing Public Emergency Services

Emergency response/fire protection for the Port is provided by LAFD; landside and waterside security is provided primarily by the Port Police, in addition to USCG. Two large fireboats and three small fireboats are strategically placed within Los Angeles Harbor. There are also fire stations equipped with fire trucks located within the Port and nearby in San Pedro. Public services are discussed in detail in Section 3.10, "Public Services and Recreation."

Additionally, the West Coast and Alaskan Tsunami Warning Center (WCATWC) operates the federal data collection and warning system for tsunami hazards in its area of responsibility (AOR), which includes the West, Alaskan, Atlantic, and Gulf coasts of the United States as well as the east and west coasts of Canada. WCATWC collects seismic data from various seismic networks throughout its AOR. This data is processed, automatically and interactively, to quickly determine the tsunami potential of an earthquake, and bulletins are issued based initially on this first analysis of seismic data. If a tsunami could have been generated, sea level data, tsunami models, and historical tsunami information are analyzed to estimate impact level (NOAA National Weather Service 2011).

WCATWC issues tsunami warnings within 10 minutes of an earthquake occurrence when a potentially tsunami-producing earthquake is greater than 7.0 on the Richter scale in the Pacific AOR. Warnings also may be issued when potentially tsunami-producing earthquakes (greater than 7.5) outside the AOR occur and are likely to affect the AOR. The geographic extent of the warning is based on the size of the earthquake, tsunami travel times throughout the AOR, and expected impact zones (NOAA National Weather Service 2011).

Tsunami bulletins and warnings are broadcast by WCATWC through standard National Weather Service (NWS) dissemination methods such as NOAA Weather Radio All Hazards, the Emergency Alert System, and the Emergency Managers Weather Information Network. State emergency service agencies receive the message through the Federal Emergency Management Agency's (FEMA's) National Warning System and the NOAA Weather Wire Service. The states immediately pass warnings to local jurisdictions (NOAA National Weather Service 2011). The USCG also relays the message via radio.

The City of Los Angeles General Plan Public Safety Element identifies the entire Port as an area that could be affected by a tsunami and inundation (City of Los Angeles Planning Department 1996). As of May 2011, LAHD is in the process of creating a port-wide emergency notification system to warn of tsunamis and other emergency situations (EMD 2011). Currently, there is a notification system for Port employees and Facility Security Officers that allows for text messaging, email, and phone messages to be relayed during an emergency. Also, a mass loudspeaker system is currently in the design phase (Malin pers. comm. 2011).

3.7.2.5 Homeland Security of the Port

3.7.2.5.1 Terrorism

Prior to the events of September 11, 2001, the prospect of a terrorist attack on a U.S. port facility or a commercial vessel in a U.S. port would have been considered highly speculative under CEQA and not analyzed. The climate of the world today has added an additional unknown factor for consideration (i.e., terrorism). There are limited data available to indicate the likelihood of a terrorist attack aimed at the Port or the proposed Project; therefore, the probability component as it relates to terrorism contains a considerable amount of uncertainty. Nonetheless, this fact does not invalidate the analysis contained herein. A terrorist action could be the cause of events described in this section such as hazardous materials release and/or explosion. The potential impact of a hazardous materials release, explosion, or spill would remain as described herein.

Terrorism risk can be generally defined by the combined factors of threat, vulnerability, and consequence. In this context, terrorism risk represents the expected consequences of terrorist actions, taking into account the likelihood that these actions will be attempted and the likelihood that they will be successful. Of the three elements of risk, the threat of a terrorist action cannot be directly affected by activities in the Port. The vulnerability of the Port and of individual cargo terminals can be reduced by implementing security measures. The expected consequences of a terrorist action can also be affected by, or reduced by, certain actions, such as implementing security measures and emergency response preparations.

3.7.2.5.2 Existing Security Measures/Initiatives

Numerous security measures have been implemented in the Port in the wake of the terrorist attacks of September 11, 2001. Federal, state, and local agencies, as well as private industry, have implemented and coordinated many security operations and physical security enhancements. The result is a layered approach to Port security that includes LAHD's security program. The Port has a number of security initiatives under way, including significant expansion of the Port Police, which will result in additional police vehicles on the streets and police boats on the water. The applicable initiatives in this area identified for implementation in fiscal year 2010–2011 include:

- completing one of the last major phases of the new Port Police Headquarters,

- installation of state-of-the-art surveillance and emergency operations centers at the new Port Police headquarters and elsewhere in the Port,
- installation of a Port-wide fiber optic network,
- improvements to the Port Police tactical radio communications system,
- acquisition of a computer aided dispatch and records management system,
- acquisition of a Port Police integrated command and control system, and
- security enhancements at the Port's main administration building on Palos Verdes Street.

In the area of homeland security, LAHD will continue to embrace technology while focusing its efforts on those areas of particular interest to the Port. Current applicable Port homeland security initiatives include:

- expanding the Port's waterside camera system,
- establishing restricted areas for noncommercial vehicles and vessels,
- installing additional shoreside cameras at critical locations,
- updating long-range security plans for the Port,
- developing a security awareness training program, and
- enhancing outreach to constituents.

3.7.2.6 Tsunami Hazards

As discussed in Section 3.5, "Geology and Soils," there is the potential for a large tsunami to affect the Port. The Port is subject to diurnal tides, meaning two high tides and two low tides during a 24-hour period. The average of the lowest water level during low-tide periods each day is typically set as a benchmark of 0 feet (0 meters) and is defined as the MLLW Level. A model has been developed specifically for the LA/LB Harbors complex to predict tsunami wave heights. The model specifically examined seven different earthquake- and landslide-generated tsunami scenarios and considered local landfill configurations, bathymetric features, and the interaction of tsunami wave propagation to predict tsunami wave heights that could affect the harbor (Moffatt and Nichol 2007). The model predicts tsunami wave heights with respect to MSL rather than MLLW, which is a reasonable, average condition under which a tsunami might occur (Moffatt and Nichol 2007).

The lowest deck elevations identified in the tsunami study in the proposed project area included Berths 56–60 along the East Channel with adjacent lowest deck elevations as low as 11.19 feet above MSL, and Berths 70–71 along the Main Channel with adjacent lowest deck elevations as low as 12.17 feet above MSL.

Based on the model, four out of the seven scenarios could result in tsunami-induced flooding in the proposed project area. Tables 3.5-3 and 3.5-4 in Section 3.5, "Geology and Soils," show the four scenarios that could lead to tsunami-induced flooding in the proposed project area and the locations within the proposed project

area that would experience overtopping in the event of a tsunami generated under the conditions modeled. Figures 3.5-5 through 3.5-8 in Section 3.5, "Geology and Soils," depict the modeling results and the water level, in meters, above mean sea level.

3.7.3 Applicable Regulations

Regulations applicable to the proposed Project are designed to govern hazardous materials and prevent their accidental release, and to ensure the security of the Port area. These regulations also are designed to limit the risk of upset during the use, transport, handling, storage, and disposal of hazardous materials. Additionally, numerous security measures have been implemented in the Port area in the wake of the terrorist actions of September 11, 2001. Federal, state, and local agencies, as well as private industry, have implemented and coordinated many security operations and physical security enhancements. The result is a layered approach to Port security that includes LAHD's security program. The proposed Project is located within the Port but does not include any cargo or passenger handling facilities. Although LAHD is responsible for the overall protection of the proposed project area, as well as reviewing tenant security operations, each tenant is individually and specifically required to comply with federal and state security and emergency regulations, which are enforced by agencies such as the USCG and LAFD. The proposed Project would be subject to numerous federal, state, and local laws and regulations, including, but not limited to, those described below.

3.7.3.1 Federal Regulations

3.7.3.1.1 Emergency Planning and Community Right-to-Know Act (42 USC 11001 et seq.)

Also known as Title III of the SARA, the EPCRA was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC). The SERCs were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee (LEPC) for each district. EPCRA provides requirements for emergency release notification, chemical inventory reporting, and toxic release inventories for facilities that handle chemicals.

3.7.3.1.2 U.S. Coast Guard, Navigation and Navigable Waters (33 CFR)

The USCG, through Title 33, "Navigation and Navigable Waters," is the federal agency responsible for vessel inspection, marine terminal operations safety, coordination of federal responses to marine emergencies, enforcement of marine

pollution statutes, marine safety (navigation aids, etc.), and operation of the National Response Center for spill response, and is the lead agency for offshore spill response.

Several sections of 33 CFR guide USCG activities within the Port. However, regulations regarding terminal and cruise facilities would not be applicable to the proposed Project. 33 CFR 6 defines the security zones within the harbor. *Security zone* means all land, water, or land and water so designated by the USCG Captain of the Port and deemed necessary to prevent damage to any vessel or waterfront facility and safeguard ports, harbors, territories, or waters of the U.S. To ensure the security of waterfront facilities at the Port, the USCG Captain of the Port may prescribe conditions and restrictions relating to the safety of waterfront facilities and vessels in port found necessary under existing circumstances.

3.7.3.2 Regional and Local Regulations

3.7.3.2.1 Port Master Plan

Intended to guide development within the Port, the PMP was certified in 1979 and was most recently amended in August 2011. The PMP was certified by the California Coastal Commission and approved by the Board of Harbor Commissioners. The PMP divides the Port into nine individual planning areas (PAs). The proposed project site is located entirely in PA2 (West Bank). The PMP identifies land use compatibility guidelines for PA2, as well as short- and long-term plans for the area. The long-range goal for PA2 is to relocate hazardous and potentially incompatible cargo operations to Terminal Island. This area would then be oriented to commercial, recreational, commercial fishing, and nonhazardous cargo and support activities. The PMP acknowledges that the preferred long-range uses for PA2 would necessitate the phasing-out and relocation of the existing deep water oil terminal and petroleum and petrochemical storage tanks. See Section 3.8, "Land Use and Planning," for a detailed discussion regarding the PMP and its applicability to the proposed Project.

3.7.3.2.2 Port Risk Management Plan

The RMP, an element of the PMP, was adopted in November 1983, pursuant to the California Coastal Act of 1976 (LAHD 1983). The purpose of the RMP is to provide siting criteria related to vulnerable resources,[1] and handling and storage guidelines

[1] Vulnerable resources are defined as resources within and around the Ports that may be damaged by the effects of casualty. Vulnerable resources are, for this RMP, divided into the two prime categories of people and facilities. People are further subdivided into the two groupings of: (1) residential, recreation, and visitor; and (2) 2orking. For decision-making purposes, LAHD and the Los Angeles Fire Department will define and approve, on an individual basis, future vulnerable resources that are identified as significant residential, recreational, visitor, and high-density working populations that may be unwittingly or unwillingly placed at high risk and direct high economic impact facilities. Existing vulnerable resources have been identified in the RMP and will be used as criteria in identifying future vulnerable resources. Developments whose concepts are not included in the PMP involving significant residential, recreational, visitor, or high-density working populations are defined as *New Vulnerable Resources*.

for potentially hazardous liquid bulk materials. Vulnerable resources are described as high density populations in the Port and adjacent areas and critical impact facilities in the Port, which if damaged or destroyed would have a significant impact on Port operations. There are four types of vulnerable populations: residential, recreational, visitor, and the working populations at the Port. Working populations in the Port are protected under the specific risk management plans and emergency policies related to the handling, storage, and use of hazardous materials of the businesses that employ them.

The RMP and supporting documents outline the criteria to determine whether a facility is considered hazardous and the appropriate methodology to calculate the hazardous footprint if needed. The hazardous footprint of a hazardous facility is defined by the RMP as the area wherein a specified level of adverse effect would be exceeded against a specified vulnerable resource.

The siting criteria for locating vulnerable resources and hazardous facilities stipulate that no new vulnerable resources will be permitted to be located within the hazardous footprint areas of existing or approved facilities handling hazardous liquid bulk cargoes except where overriding considerations apply.

The RMP provides guidance for existing activities and future development of the Port to minimize or eliminate impacts on vulnerable resources from accidental releases. The overall policy of the RMP has as its objective to minimize or eliminate the overlaps of hazardous footprints and areas of substantial residential, visitor, recreational, and high density working populations and direct high economic impact facilities identified as hazardous.

3.7.3.2.3 Los Angeles Municipal Code (Fire Protection—Chapter 5, Section 57, Divisions 4 and 5)

Chapter 5, Section 57, Divisions 4 and 5 of the municipal code regulate the construction of buildings and other structures used to store flammable hazardous materials and the storage of such materials. These regulations ensure that a business is properly equipped and operates in a safe manner and in accordance with all applicable laws and regulations. Permits are issued by LAFD.

3.7.3.2.4 Los Angeles Municipal Code (Public Property—Chapter 6, Article 4)

Chapter 6, Article 4 of the municipal code regulates the discharge of materials into sanitary sewer and storm drains. It requires the construction of spill-containment structures to prevent the entry of forbidden materials, such as hazardous materials, into sanitary sewers and storm drains.

3.7.3.2.5 Emergency Response and Evacuation Plans

LAHD, in conjunction with the City of Los Angeles, LAFD, LAPD, Port Police, and USCG, is responsible for managing any emergency related to Port operations, depending on the severity of the emergency.

The City of Los Angeles EPD provides citywide emergency leadership, continuity, and direction to enable the City and all of its various departments and divisions to respond to, recover from, and mitigate the impact of natural, human-made, or technological disasters upon its people or property (EMD 2012). The EPD has prepared a City of Los Angeles Emergency Operations Organization Manual that describes the organization, responsibilities, and priorities of all City departments and local agencies in case of an emergency (EOO 2006). The manual is maintained by EPD and is organized by type of emergency as well as by the City departments that are responsible for responding to certain emergencies. The manual includes the following sections applicable to the Port area:

- LAHD Plan,
- Hazardous Materials Annex, and
- Tsunami Response Plan Annex.

Generally, these various plans established the following emergency operational priorities for the Port:

- provide Port security,
- evacuate vessels for the safety of crew members,
- evacuate Port facilities and the Port area,
- regulate the movement and anchorage of vessels,
- establish liaison with other City/government agencies,
- procure and maintain emergency supplies and equipment,
- establish damage assessment and prioritization procedures,
- identify shelter facilities, and
- provide employee emergency preparedness training.

Specifically, the LAHD Plan of the City of Los Angeles Emergency Operations Organization Manual identifies very general initial policies and procedures covering LAHD's response in the event of any emergency.

The Hazardous Materials Annex contains information regarding the chain of command and the general organization of any response to a hazardous material release anywhere in the City, including the Port area (EOO 1993). It includes an emergency checklist for LAHD to follow should a hazardous materials release occur within the Port area. The checklist identifies specific pre-event, response, and

recovery action items and identifies the respective LAHD divisions (i.e., Port Police) that are responsible for carrying out the action items.

The Tsunami Response Plan Annex identifies the Port area as a Tsunami Inundation Zone and outlines policies and procedures of nine different City departments (including LAHD, LAPD, LAFD, and EMD) in the event of a tsunami (EOO 2007). The Tsunami Response Plan identifies evacuation routes for the San Pedro area and the harbor area and specifies evacuation locations to which evacuees should retreat. The plan identifies that the mission of LAHD with respect to a tsunami is to provide employees, tenants, and the public with a safe, well-planned, and organized method of evacuating the Port district. It outlines several actions that the Port Police are responsible for, including following the established evacuation checklist, evacuating the affected Tsunami Inundation Zone, and activating notification procedures. The divisional organization and basic functions that would support the Tsunami Response Plan for the Port area are consistent with LAHD's emergency plan and procedures.

The City and LAHD have adopted the SEMS to manage responses to multi-agency and multi-jurisdiction emergencies and facilitate communications and coordination among all levels of the system and among all responding agencies. Additionally, the City currently uses a new emergency management process that incorporates Homeland Security's NIMS and ICS and the application of standardized procedures and preparedness measures (Malin pers. comm. 2011).

In addition to the emergency response plans EPD maintains, LAHD maintains emergency response and evacuation plans. The Homeland Security Division of LAHD is responsible for maintaining and implementing LAHD's Emergency Procedures Plan. This plan was last revised in 2012. LAHD's Emergency Procedures Plan references LAHD's evacuation plan. The evacuation plan is maintained and implemented by the Port Police and in consultation with the Homeland Security Division and USCG. LAHD's evacuation plan was last updated in 2005 and subsequent reviews by LAHD have concluded an update is not needed at this time.

Finally, each tenant at the Port is responsible for maintaining its own emergency response plan (Malin pers. comm. 2008). Tenants must comply with emergency and security regulations enforced by LAFD, Port Police, Homeland Security Division, and USCG.

3.7.3.2.6 Hazardous Material Release Response Plans and Inventory Law (California Health and Safety Code, Chapter 6.6)

This state right-to-know law requires businesses to develop a Hazardous Material Management Plan or a business plan for hazardous materials emergencies if they handle more than 500 pounds, 55 gallons, or 200 cubic feet of hazardous materials. In addition, the business plan would include an inventory of all hazardous materials stored or handled at the facility above these thresholds. This law is designed to reduce the occurrence and severity of hazardous materials releases. The Hazardous

Materials Management Plan or business plan must be submitted to the CUPA, which, in this case, is LACFD. In 1997, the HHMD within the LACFD became a CUPA to administer the following programs within Los Angeles County: the Hazardous Waste Generator Program, the Hazardous Materials Release Response Plans and Inventory Program, the Cal-ARP, the Aboveground Storage Tank Program, and the Underground Storage Tank Program. The state has integrated the federal EPCRA reporting requirements into this law; once a facility is in compliance with the local administering agency requirements, submittals to other agencies are not required.

3.7.3.2.7 Other Regional and Local Requirements

The Safety Element of the City of Los Angeles General Plan addresses the issue of protection of residents from unreasonable risks associated with natural disasters (e.g., fires, floods, and earthquakes). The Safety Element provides a contextual framework for understanding the relationship among hazard mitigation, response to a natural disaster, and initial recovery from a natural disaster.

3.7.4 Impacts Analysis

3.7.4.1 Methodology

CEQA guidelines require identifying any adverse change in any of the physical conditions in the area affected by the proposed Project, including a change in the probability of spills or releases. The potential impacts from proposed project–related emergency preparedness procedures and releases of hazardous materials into the environment, which could affect public health and safety, are qualitatively evaluated using the context of existing federal, state, regional, and local regulations and policies.

3.7.4.1.1 Upset Resulting from Terrorism

Analysis of the risk of upset is based primarily on potential frequencies of occurrence for various events and upset conditions as established by historical data. The state of the world today has added an additional unknown factor for consideration, i.e., terrorism. There are limited data available to indicate the likelihood of a terrorist attack aimed at the Port or the proposed Project; therefore, the probability component of the analysis contains a considerable amount of uncertainty. Nonetheless, this fact does not invalidate the analysis contained herein. Terrorism can be viewed as a potential trigger that could initiate events such as hazardous materials release and/or explosion. The potential impact of those events, once triggered by whatever means, would remain as described herein.

3.7.4.2 Thresholds of Significance

The proposed Project would have a significant impact related to emergency preparedness and the release of hazardous material(s) if it would:

RISK-1: Not comply with applicable federal, state, regional, and local security and safety regulations, and LAHD policies guiding Port development;

RISK-2: Substantially interfere with an existing emergency response or evacuation plan or require a new emergency or evacuation plan, thereby increasing the risk of injury or death;

RISK-3: Increase public health and safety concern as a result of an accidental spill, release, or explosion of hazardous material(s) due to a tsunami.

RISK-4: Substantially increase the likelihood of a spill, release, or explosion of hazardous material(s) due to a terrorist action; and,

RISK-5: Substantially increase the likelihood of an accidental spill, release, or explosion of hazardous material(s) as a result of proposed project–related modifications.

RISK-6: Introduce the general public to hazard(s) defined by the EPA and the Port RMP associated with offsite facilities.

Note that RISK-1, RISK-3, RISK-4, RISK-5, and RISK-6 above all consider the following questions contained in Appendix G of the CEQA Guidelines as they relate to exposing the public or environment to significant hazards. These questions include whether the proposed Project would:

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

3.7.4.3 Impacts and Mitigation

3.7.4.3.1 Construction Impacts

Impact RISK-1a: Construction of the proposed Project would comply with applicable federal, state, regional, and local security and safety regulations, and LAHD policies guiding Port development.

The consequences of construction-related spills are generally reduced in comparison to other accidental spills and releases because the amount of hazardous material released during a construction-related spill is small. Still, the construction of the

proposed Project would potentially result in a conflict with applicable safety and security regulations and policies guiding the development within the Port if safety and security regulations are not followed.

Moreover, there are several listings for unauthorized releases in the ERNS database at the Westways site, and remediation activities are ongoing in response to historic contamination of subsurface soil, soil vapor, groundwater, and sediment. As such, redevelopment of the Westways tanks site under the proposed Project would first require remediation under the oversight of the RWQCB in compliance with applicable federal, state, regional, and local security and safety regulations, which would preclude the potential for significant impacts related to remediation of the existing site contamination. This is discussed further in Section 3.6, "Groundwater and Soils." Additionally, it should be noted that demolition of the Westways' tanks, piping, and related structures at Berths 70–71 has been analyzed under the San Pedro Waterfront EIS/EIR and is not considered a component of the proposed Project.

As discussed above, several regulations cover the construction that would occur as part of the proposed Project: the RCRA, Hazardous and Solid Waste Act (HSWA), CERCLA, CCR 22 and 26, and the California Hazardous Waste Control Law. These would govern proper containment, spill control, and disposal of hazardous waste generated during demolition and construction. Implementing increased inventory accountability, spill prevention controls, and waste disposal controls associated with these regulations would limit both the frequency and severity of potential hazardous materials releases during demolition and construction activities. Potential releases of hazardous substances during demolition and/or construction would be addressed through EPCRA, which is administered in California by SERC and the Hazardous Material Release Response Plans and Inventory Law.

In addition, demolition and construction would be completed in accordance with the Los Angeles Municipal Fire Code, which regulates the construction of buildings and other structures used to store flammable hazardous materials, and the Los Angeles Municipal Public Property Code, which regulates the discharge of materials into the sanitary sewer and storm drain. The latter requires the construction of spill-containment structures to prevent the entry of forbidden materials, such as hazardous materials, into sanitary sewers and storm drains. LAHD maintains compliance with these federal, state, and local laws through a variety of methods, including internal compliance reviews, preparation of regulatory plans, and agency oversight. These regulations must be adhered to during design and construction of the proposed Project.

Standard BMPs would also be used during construction and demolition activities to minimize runoff of contaminants and air pollutants, in compliance with the State General Permit for Stormwater Discharges Associated with Construction Activity (Order No. 2009-0009-DWQ, amended by Order No. 2010-0014-DWQ) and the project-specific SWPPP (see Section 3.13, "Water Quality, Sediments, and Oceanography," for more information). Construction/demolition activities would be conducted using BMPs in accordance with City guidelines, as detailed in the *Development Best Management Practices Handbook* (City 2004), and the *LAHD Sustainable Construction Guidelines* (LAHD 2008). During construction, contractors would employ management controls to minimize potential impacts presented by the

use of hazardous materials during the construction phase of the proposed Project. These controls include: (1) developing required management plans, e.g., a Spill Prevention, Control, and Countermeasure (SPCC) Plan; (2) secondary containment; (3) separate storage of incompatible materials; and (4) proper training of personnel.

In addition, construction personnel would be trained in safety and defensive emergency response procedures. Construction personnel would also receive hazardous-waste–related training that focuses on recognition of potentially hazardous materials that may be encountered during subsurface excavations for proposed structures. If such hazardous material is suspected, contingency procedures would be followed to protect worker safety and public health. All vehicles and construction equipment would be inspected to ensure that no fluids are leaking (e.g., oil, hydraulic fluid, lubricants, or brake fluid) and that all fuels and fluids are stored in proper, clearly labeled containers. Hazardous materials that must be disposed of would be treated as hazardous waste in accordance with the appropriate regulations for storage, transportation, and disposal of hazardous waste.

Furthermore, per state regulations, prior to construction, a Solid Waste Management Plan would be prepared and approved. During construction, the onsite management and offsite disposal procedures for solid waste would be adhered to as defined in the Solid Waste Management Plan for the proposed Project. Waste would be stockpiled temporarily before disposal off site. Hazardous wastes generated during construction would be collected in hazardous waste accumulation containers near the point of generation and moved daily to the construction contractor's 90-day hazardous waste storage area on site. The accumulated waste would be delivered to or collected by an authorized waste management facility.

Existing buildings within the proposed project site, including buildings to be demolished within Berths 57 and 260, could contain lead-based paint (LBP) and ACM. There are existing regulations and requirements for demolition and conversion of buildings that could potentially contain LBP or ACM (i.e. SCAQMD Rule 1403—Asbestos Emissions from Demolition/Renovation Activities). The proposed Project would abide by the following per local and state regulations:

- Prior to demolition of the site, the Port would retain a qualified engineer/geologist to assess the building to be demolished to determine the presence, or lack, of PCB (polychlorinated biphenyls)-containing materials, ACM, and LBP per state law. Should it be deemed necessary, remediation would be implemented in accordance with the recommendations of these assessments and in compliance with agency regulations. The following measures would occur as part of testing and demolition of the structure on site:
  - Structural materials would be tested for potentially hazardous materials through a state-certified laboratory.
  - Documentation would include a description of field procedures, tabulations of analytical results, and maps of sample locations. An evaluation of the levels and extent of contaminants found, and conclusions and recommendations regarding the handling and removal of potentially hazardous substances would be provided.

- Removal of ACM and LBP would be conducted by ACM- and LBP-certified removal contractors and trained workers. Appropriate dust monitoring would occur in conjunction with ACM and LBP removal activities.
- PCB-containing light ballasts and other PCB-containing materials found on site would be removed by a hazardous materials removal contractor.
- LAHD would prepare a site Health and Safety Plan for work involving the removal of ACM-, LBP-, and PCB-containing materials.
- The disposal process would include transport by a state-certified hazardous material hauler to a state-certified disposal or recycling facility licensed to accept and treat hazardous waste generated by demolition of the onsite structure.

Impact Determination

Construction and demolition for the proposed Project would involve the handling and use of hazardous materials. However, the consequences of construction-related spills are generally reduced in comparison to other accidental spills and releases because the amount of hazardous material released during a construction-related spill is small—volume in any single piece of construction equipment is generally less than 50 gallons, and fuel trucks are limited to 10,000 gallons or less. Construction-related spills of hazardous materials are not uncommon, but the enforcement of construction and demolition standards, including BMPs by appropriate local and state agencies, would minimize the potential for an accidental release of petroleum products and/or hazardous materials or explosions during construction.

Moreover, potential release of ACM and LBP would be avoided through the required implementation of local and state regulations, including SCAQMD Rule 1403. Impacts related to the release of ACM or LBP would be less than significant.

Therefore, because construction of the proposed Project would comply with applicable security and safety regulations and/or LAHD policies guiding Port development, construction impacts under threshold RISK-1 would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact RISK-2a: Construction of the proposed Project would not substantially interfere with an existing emergency response or evacuation plan or require a new emergency or evacuation plan, thereby increasing the risk of injury or death.

Emergency response and evacuation planning is the responsibility of LAHD's Homeland Security Division, LAPD, LAFD, and USCG. The proposed Project's construction and demolition activities would be subject to emergency response and evacuation systems implemented by the LAPD and LAFD. Prior to commencement of construction/demolition activities, standard protocol would be followed, and all plans would be reviewed by LAFD to ensure adequate emergency access is maintained throughout the process.

During construction and/or demolition activities, as required by the municipal fire code, LAFD would require that adequate vehicular access to the proposed project area be provided and maintained. This would be ensured and enforced via the construction traffic control plan required for the proposed Project (for further discussion of the construction traffic control plan, refer to Section 3.11, "Transportation and Circulation—Ground and Marine," Impact TC-1a and Mitigation Measure MM TC-1).

Additionally, LAFD would be responsible for waterside first response in the event of an emergency. USCG, Port Police, and LAPD would also support LAFD in the event of a waterside emergency.

Impact Determination

Proposed project contractors would be required to adhere to all Homeland Security, LAPD, and LAFD emergency response and evacuation regulations discussed above in Section 3.7.2.4, "Existing Public Emergency Services," ensuring compliance with existing emergency response plans. Therefore, construction/demolition activities would not substantially interfere with an existing emergency response or evacuation plan or increase the risk of injury or death. Construction impacts under threshold RISK-2a would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact RISK-3a: Construction of the proposed Project would not result in a substantial increase in public health and safety concerns as a result of the accidental release, spill, or explosion of hazardous materials due to a tsunami.

As discussed in Section 3.5, "Geology and Soils," and under Section 3.7.2.6, "Tsunami Hazards" above, there is the potential for a large tsunami to affect the Port. Impacts from seismically induced tsunamis and seiches are possible for the entire California coastline. A model has been developed specifically for the LA/LB Harbors to predict tsunami wave heights (Moffatt and Nichol 2007).

For the Palos Verdes Landslide II scenario, Moffat and Nichol (2007) indicate a potential 23-foot wave height at the south end of the proposed project site. Based on studies cited above, as a part of their MOTEMS (SLC 2011) tsunami run-up projections for the Port are 8 and 15 feet AMSL, at 100- and 500-year intervals, respectively. The proposed Project is located between 4.9 and 11.2 feet above MSL; therefore, there is a risk of coastal flooding and deck overtopping during a 500-year interval tsunami. This, in turn, could lead to an accidental release, spill, or explosion of hazardous material(s) during construction activities. Designing new facilities based on existing building codes may not prevent substantial damage to structures from coastal flooding. In addition, projects in construction phases are especially susceptible to damage due to temporary conditions, such as unfinished structures, which are typically not in a condition to withstand coastal flooding. However, construction of the proposed Project would not handle or store substantial amounts of hazardous materials, and the potential for a major tsunami is very low during the period of construction for the proposed Project (see Section 3.5, "Geology and Soils," for additional information on the probability of a major tsunami). The combination of these factors would result in a remote risk and consequence related to health and safety concerns as a result of the accidental release, spill, or explosion of hazardous materials due to a tsunami.

Impact Determination

Although impacts due to seismically induced tsunamis and seiches are typical for the entire California coastline, these impacts would not be increased by the construction of the proposed Project. The potential is very low for a major tsunami to occur that would cause the kind of results predicted in the tsunami model study (see Section 3.5, "Geology and Soils," for additional information on the probability of a major tsunami). Additionally, the potential consequences of such accidents would be small due to the localized, short-term nature of the releases. The volume of spilled fuel is also expected to be relatively low. Although there would be fuel-containing equipment present during construction, most equipment would be equipped with watertight tanks, with the most likely scenario being the infiltration of water into the tank and fuel combustion chambers and very little fuel spilled. Thus, the volume spilled in the event of a tsunami would likely be less than 10,000 gallons, which is a manageable amount to clean up that would not result in significant environmental impacts. Emergency planning and coordination between the Port contractors and LAHD would contribute to reducing onsite injuries during a tsunami. Port engineers and LAHD police will work with contractors to develop earthquake and tsunami response training and procedures

based on the Port's tsunami plan to ensure that construction and operations personnel will be prepared to act in the event of a large seismic event. These procedures will include immediate evacuation requirements should a large seismic event affect the proposed project site. Compliance with all applicable laws and regulations would minimize exposure to risk from tsunami and seiche hazards, and impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact RISK-4a: Construction of the proposed Project would not substantially increase the likelihood of a spill, release, or explosion of hazardous material(s) due to a terrorist action.

As discussed in Section 3.7.2.5, "Homeland Security of the Port," the risk of terrorism can be generally measured by a combination of three factors:

- threat of a terrorist action (which includes the likelihood of action),
- vulnerability of a particular facility to a terrorist action, and
- consequence(s) of a terrorist action.

Of the three elements of risk, the threat of a terrorist action cannot be reduced during construction activities within the Port. LAHD has no control over the capability, decision-making, or intentions of a terrorist organization that is planning to inflict damage and harm on the Port; therefore, LAHD cannot control the threat of a terrorist action against the construction activities of the proposed Project. However, simply because the threat of a terrorist action cannot be quantified does not mean it does not exist. In fact, the possibility of a terrorist action against the Port exists as part of the baseline because of the Port's maritime operations and the existing cruise facilities and cruise vessels. However, the threat of a terrorist action is not likely to appreciably change over the existing baseline during construction or demolition activities of the proposed Project.

Construction and demolition activities for the proposed Project would involve the handling and use of certain amounts of hazardous materials including vehicle fuels and other flammable chemicals. The potential consequence of a terrorist action on such activities would mainly concern relatively small potential targets such as construction vehicles and elements undergoing construction. Fuel volume in any single piece of construction equipment is generally less than 50 gallons, and fuel trucks are limited to 10,000 gallons or less. Construction does not include any sensitive elements (e.g., a significant power source or high-profile target) that would be considered a likely

target for terrorist activities. The tanks at the existing Westways site and associated onsite pipelines have been emptied, minimizing the amount of material that could be released, spilled, or exploded during a terrorist act. Therefore, these tanks would not likely be targeted for terrorist activity, and if they were, the consequences of a hazardous spill, release, or explosion would not be substantially increased through the construction of the proposed Project. The enforcement of construction and demolition standards, including BMPs by appropriate local and state agencies (i.e., LAPD, Port Police, LAFD, LAHD), would minimize the potential for a spill, release, or explosion of hazardous materials due to a terrorist action. Furthermore, the enforcement of these standards would reduce the impact should a spill, release, or explosion of hazardous material occur due to a terrorist action.

Consequences associated with a terrorist attack during general construction would be low. Similarly, impacts related to the vulnerability of the proposed Project during construction and consequences of having sensitive receptors on site during construction activities would be negligible because the damage and general effect would be limited. Impacts related to the likelihood of sensitive receptors being exposed to a significant health hazard through a spill, release, or explosion due to a terrorist action during general construction would be less than significant.

Impact Determination

The construction of the proposed Project would comply with applicable security and safety regulations discussed under Impact RISK-1a and above under Section 3.7.2.5, "Homeland Security of the Port," and Section 3.7.3, "Applicable Regulations," and/or LAHD policies guiding Port development, reducing the vulnerability of construction activities to terrorist actions. Therefore, construction and/or demolition activities would not result in an increase in vulnerability or consequence of a terrorist action leading to a greater likelihood of a spill, release, or explosion of hazardous material(s). Impact RISK-4a, related to a substantial increase in the likelihood of a spill, release, or explosion of hazardous material(s) due to a terrorist action, would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact RISK-5a: Construction of the proposed Project would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous material(s) as a result of proposed project–related modifications.

Potential short-term hazards that could potentially increase the likelihood of an accidental spill, release, or explosion include construction activities that involve the handling, storage, and/or transport of fuels, lubricating fluids, solvents, and other potentially hazardous material. Additionally, construction equipment could spill oil, gas, or fluids during operation or refueling, resulting in potential health and safety impacts on construction personnel and others.

Although construction-related spills of hazardous materials are not uncommon, the potential consequences of such accidents are generally small due to the localized, short-term nature of the releases. The volume of the spills would be relatively small because the volume in any single vehicle is generally less than 50 gallons, and fuel trucks are limited to 10,000 gallons or less. Additionally, quantities of hazardous materials that exceed the thresholds provided in Chapter 6.95 of the California Health and Safety Code would be subject to a Release Response Plan (RRP) and a Hazardous Materials Inventory (HMI). BMPs and Los Angeles Municipal Code regulations (Chapter 5, Section 57, Divisions 4 and 5; Chapter 6, Article 4) would also govern construction and demolition activities. Federal and state regulations that govern the storage of hazardous materials in containers (i.e., the types of materials and the size of packages containing hazardous materials) and the separation of containers holding hazardous materials would limit the potential adverse impacts of contamination to a relatively small area. As such, all hazardous materials used during construction of the proposed Project would be used and stored in compliance with applicable state and federal requirements.

Standard BMPs would also be used during construction and demolition activities to minimize runoff of contaminants, in compliance with the State General Permit for Stormwater Discharges Associated with Construction Activity (Water Quality Order 2009-0009-DWQ, amended with Order 2010-0014-DWQ) and the proposed project-specific SWPPP (see Section 3.13, “Water Quality, Sediments, and Oceanography,” for more information). These may include, but would not be limited to, temporary sediment basins, spill prevention and control, solid waste management, contaminated soil management, concrete waste management, sanitary-septic waste management, and other construction practices implemented by LAHD. Therefore, compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would minimize the potential for significant accidental spills, releases, or explosions of hazardous materials to occur and affect public health and safety during construction of the proposed Project.

The construction of the proposed Project includes the demolition of the entry building at Berth 57; removal of several commercial buildings located within Berth 260; the conversion of several transit sheds within Berths 56-60; and the construction

of a wave tank building and government building within Berths 70–71, which would succeed remediation of the Westway site.

There would be potential for hazardous materials spills, releases, or explosions during the demolition and/or conversion of these buildings. However, the removal and conversion activities at these sites would require adherence to all standards and regulations discussed above under Impact RISK-1a (i.e., EPCRA, LAFD regulations, DTSC, SCAQMD, and other state and federal regulations and guidelines) governing the decommissioning and remediation of hazardous materials and release of air contaminants during demolition. Additionally, the removal and conversion would include remediation efforts to remove the known or suspected hazardous groundwater and soil contamination at the site. As mentioned in RISK-1a, demolition of the Westway tanks, piping, and related structures at Berths 70–71 has been analyzed under the San Pedro Waterfront EIS/EIR and is not considered a component of the proposed Project. Remediation activities are ongoing in response to historic contamination of subsurface soil, soil vapor, groundwater, and sediment. As such, redevelopment of the Westway tanks site under the proposed Project would continue to require remediation activities in compliance with the RWQCB and other applicable federal, state, regional, and local security and safety regulations, which would preclude the potential for significant impacts related to remediation of the existing site contamination. This is discussed further in Section 3.6, "Groundwater and Soils."

As discussed under Impact RISK-1a, the existing buildings could contain LBP and ACM, which could be released upon demolition or conversion. There are existing regulations and requirements for demolition and conversion of buildings that could potentially contain LBP or ACM (i.e., SCAQMD Rule 1403—Asbestos Emissions from Demolition/Renovation Activities). See the discussion under Impact HAZ-1a.

Impact Determination

General construction and demolition/conversion activities for the proposed Project would not involve the handling of significant amounts of hazardous materials beyond those needed for construction vehicle operations and typical construction activities. Furthermore, implementation of construction and demolition standards, including BMPs, and compliance with the state and federal requirements for the transport, handling, and storage of any hazardous materials during construction and demolition phases, as described in Impact RISK-1a, would minimize the potential for an accidental release of petroleum products and/or hazardous materials and/or explosion during the construction/demolition activities. Therefore, general construction would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous materials as a result of modifications related to the proposed Project.

The demolition/conversion of any existing buildings would require adherence to EPCRA, LAFD regulations, DTSC, and the California Division of Occupational Safety and Health (Cal/OSHA) and other state and federal regulations and guidelines governing the decommissioning of buildings potentially containing asbestos and lead, as well as regulating the handling, storage, and use of hazardous materials during the demolition of the existing buildings. Therefore, the demolition of existing buildings

within Berth 57 and 260; the conversion of transit sheds within Berths 56–60; and the construction of a wave tank building and government building (possible NOAA building) within Berths 70–71 would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous materials as a result of modifications related to the proposed Project.

Therefore, construction of the proposed Project would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous material(s) as a result of proposed project–related modifications. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

RISK-6a: Construction of the proposed Project would introduce the general public to hazard(s) defined by the EPA and the Port RMP associated with offsite facilities.

During construction of the proposed Project, Mike's fueling station would continue to operate in its existing location. Mike's currently handles several different types of hazardous materials including clear diesel, lube oil, red dye diesel, and waste lube oil and includes five aboveground storage tanks. Although the facility would remain in its existing location, it would not continue to handle hazardous materials with flashpoints below 140°F per Mitigation Measure MM RISK-1 of the San Pedro Waterfront Project EIS/EIR. The risk of an accidental spill, release, or explosion at Mike's fueling station would not increase over the existing baseline, and the risk has been reduced by the San Pedro Waterfront Project EIS/EIR. Therefore, with incorporation of the same mitigation, the proposed Project would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous materials during construction activities of the proposed Project.

Impact Determination

Mike's fueling station currently meets all safety and environmental standards for the handling and storing of hazardous materials, and would not expand or increase its inventory of materials. Per Mitigation Measure MM RISK-1 of the San Pedro Waterfront Project EIS/EIR, products with a flashpoint below 140°F will not be permitted and Mike's fueling station will cease to handle hazardous materials with flashpoints below 140°F. Therefore, the proposed Project would not result in a substantial increase in the potential for a hazardous materials spill, release, or explosion at Mike's fueling station with incorporation of Mitigation Measure MM RISK-1 identified in the San Pedro Waterfront Project EIS/EIR.

Mitigation Measures

MM RISK-1. Remove all hazardous materials with flashpoints below 140°F from Mike's fueling station. Mike's fueling station will cease to handle hazardous materials with flashpoints below 140°F per the letter sent from LAHD to Mike Albano dated June 16, 2008, regarding the successor permit to revocable permit No. 98-14 prior to the operation of the proposed waterfront promenade. Products with a flashpoint below 140°F will not be permitted within the project area (i.e., San Pedro Waterfront Project area). The successor permit to RP No. 98-14 to allow the operation for Mike's fueling station and continued lease of Mike's fueling station will only allow handling of products above said threshold. Prior to the operation of the waterfront promenade, Mike's fueling station will submit written confirmation identifying the complete removal of all hazardous materials on site with a flashpoint below 140°F as directed by the letter dated June 16, 2008. At the time of the written confirmation, Mike's fueling station will also provide copies of all Material Safety Data Sheets (MSDS) for each product stored in bulk on site.

Residual Impacts

Impacts would be less than significant.

3.7.4.3.2 Operational Impacts

Impact RISK-1b: Operation of the proposed Project would comply with applicable federal, state, regional, and local security and safety regulations, and LAHD policies guiding Port development.

Operation of the proposed Project would comply with the applicable safety and security regulations and policies guiding the development of the Port. The proposed Project does not include operation of cargo, cruise, or liquid bulk facilities or other industrial uses or hazardous facilities that would be inconsistent with security and safety regulations and LAHD policies.

The proposed Project would be required to comply with the PMP, including LAHD's RMP. The PMP calls for the long-range plans for PA2 to include the relocation of hazardous and potentially incompatible cargo operations to Terminal Island and its proposed southern extension. The development of PA2 is anticipated to focus primarily on commercial, recreational, and commercial fishing, and nonhazardous cargo and support activities. The removal of the Westway terminal supports this long-range plan for PA2 by relocating an industrial area and opening up the site to potential reuse with commercial activity. The RMP provides further guidance for existing activities and future development of the Port to minimize or eliminate impacts on vulnerable resources from accidental releases. The proposed Project does not include any operations that would pose a significant risk of hazardous release on the vulnerable resources. A consistency analysis with the PMP is provided in Section 3.8, "Land Use and Planning," which determined that the proposed Project would be consistent.

The marine research laboratories and marine science business park/incubator operations would likely use small amounts of materials that could be considered hazardous, such as chemicals, fuels, and cleaning supplies, in the normal course of operation. Saltwater and life support systems could utilize ozone in water treatment. The wave tank would require chemical treatment, such as potentially chlorination, to eliminate marine growth in the tank. These operations would be required to follow all local, state, and federal regulations regarding the use, storage, and handling of these hazardous materials. These regulations are enforced by agencies such as LAFD, Cal/OSHA, CalEPA, and EPA.

Impact Determination

Operation of the proposed Project would comply with applicable safety and security regulations and policies guiding development within the Port. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact RISK-2b: Operation of the proposed Project would not substantially interfere with an existing emergency response or evacuation plan or require a new emergency or evacuation plan, thereby increasing the risk of injury or death.

The following emergency plans apply to the Port area:

- LAHD's Emergency Operations and Organization Manual (September 2006),
- Tsunami Response Plan Annex of the Emergency Operations and Organization Manual (January 2008),
- Hazardous Materials Annex of the Emergency Department Master Plan and Procedures (July 2008),
- LAHD's Emergency Procedures Plan (January 2011), and
- LAHD's evacuation plans.

The City's LAHD Emergency Operations and Organization Manual, the Tsunami Response Plan Annex, and the Hazardous Materials Annex provide general emergency response guidance to all City departments, including LAHD. In the event of an emergency, LAHD is responsible for following this guidance. Furthermore, LAPD, LAFD, and the Port Police would be able to provide adequate emergency response services during operation of the proposed Project (see Section 3.10, "Public

Services and Recreation," for more information regarding police and fire response capabilities). The proposed project components would also be subject to emergency response and evacuation systems implemented by LAFD. In addition, all plans would be reviewed by LAFD to ensure that adequate access to the proposed project vicinity is maintained. Therefore, the proposed Project would not substantially interfere with the existing LAHD Emergency Operations and Organization Manual, Tsunami Response Plan, or Hazardous Materials Annex.

The Homeland Security Division for the Port maintains control of LAHD's Emergency Procedures Plan and is responsible for the current update of the plan. This plan is designed to provide overall guidance on how LAHD responds to general emergencies, including guidance for LAHD employees. The plan identifies procedures and organizes operations for general emergencies at locations where LAHD employees work. The proposed Project does not include any specific locations for LAHD employees to work; therefore, the plan is not applicable to the proposed Project.

Tenants of the Port are required to have their own emergency management plans. Therefore, all new tenants under the proposed Project would be required to have unique emergency response plans (Malin pers. comm. 2008). These requirements and the adequacy of the tenant emergency plans would be enforced by LAFD, Port Police, Homeland Security Division of the Port, and USCG. Therefore, the proposed Project would not substantially interfere with existing emergency response plans for existing tenants, but would require new emergency response plans for new tenants.

LAHD evacuation plans are maintained and managed by the Area Maritime Security Evacuation Committee (AMSEC) and apply to all areas covered by the Ports of Los Angeles and Long Beach, which include the proposed project area. These plans are being revised and are updated on an as-needed basis by AMSEC. Additionally, LAHD is currently developing an Emergency Notification System that would support evacuation plans. Port Police is responsible for implementing the evacuation plans. Because these plans contain sensitive security material, they are not available to the general public (Malin pers. comm. 2008).

Impact Determination

Although the proposed Project is designed to bring new tenants and visitors to the waterfront area, the current emergency preparedness plans would accommodate the operation of the proposed Project. The proposed project elements would not materially change the access patterns to and from the site. Additionally, new tenants would be required to implement and follow their own emergency management plans, which would be enforced by LAHD and LAFD. Furthermore, LAHD is in the process of updating its evacuation plan and establishing an Emergency Notification System, which would include the proposed project area.

Therefore, operation of the proposed Project would not substantially interfere with an existing emergency response or evacuation plan or require a new emergency response or evacuation plan. Impact RISK-2b would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact RISK-3b: Operation of the proposed Project would not result in a substantial increased public health and safety concern as a result of the accidental release, spill, or explosion of hazardous materials due to a tsunami.

As discussed above under Impact RISK-3a, there is the potential for a large tsunami to affect the Port, and specifically a risk of flooding and deck overtopping during a tsunami at the proposed project site. However, operation of the proposed Project would not contain likely sources for accidental release, spills, or explosions in the event of a tsunami.

Impact Determination

Designing new facilities based on existing building codes may not prevent substantial damage to structures from coastal flooding as a result of tsunamis or seiches. Impacts from seismically induced tsunamis and seiches would be the same for the entire California coastline and would not increase through operation of the proposed Project. However, because the proposed Project would be located between 4.9 and 11.2 feet above MSL, there is a risk of coastal flooding during a tsunami, which could rise between 3.8 and 10.1 feet above the proposed project elevation during a 500-year seismic event. Operation of the proposed Project would involve research uses but releases, spills, or explosions of a hazardous material in the event of a tsunami would be minor because generally only small amounts of chemicals, fuels, and cleaning supplies would be on site. Additionally, saltwater and life support systems could utilize ozone in water treatment and the wave tank would require chemical treatment. These operations would be required to follow all local, state, and federal regulations regarding the use, storage, and handling of these hazardous materials. These regulations are enforced by agencies such as LAFD, Cal/OSHA, CalEPA, and EPA. As such, operations would avoid or minimize any potential to result in a public health and safety concern. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact RISK-4b: Operation of the proposed Project would not substantially increase the likelihood of a spill, release, or explosion of hazardous material(s) due to a terrorist action.

As discussed above under Impact RISK-4a, the Port is subject to potential terrorist threats. The proposed Project would increase the number of public amenities in the Port and would bring more workers and visitors to City Dock No. 1, as stated in the proposed Project's objectives. However, increasing the number of employment opportunities, public amenities (i.e., the public plaza at Berth 57 and public plaza/viewing platform at Berth 60), and recreational opportunities (i.e., waterfront promenade) would not appreciably change the likelihood of a terrorist action at the Port, because the likelihood of a terrorist action is dependent on the motivation and decision-making of a terrorist organization and LAHD has no control over these factors. Additionally, the proposed Project does not contain any significant targets (e.g., emergency major power source or high profile target) for terrorist activities that would increase the likelihood of an attack. Therefore, the likelihood of a terrorist action would remain a possibility for the proposed Project, just as it does under existing conditions at the Port.

Impact Determination

Although the proposed Project would increase the number of visitors to the area, it would not ultimately change the vulnerability of the proposed project area or the seriousness of the consequences from the existing baseline. The environmental consequences of a terrorist action, including threats to human health arising from the action and from the release, explosion, or spill of hazardous materials, would not substantially change. Therefore, operation of the proposed Project would not result in a substantial increase in the likelihood of a spill, release, or explosion of hazardous material(s) due to a terrorist action. Impact RISK-4b would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact RISK-5b: Operation of the proposed Project would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous material(s) as a result of proposed project–related modifications.

The proposed Project would include the infrastructure improvements and enhancements to existing transit sheds within Berths 56–60 (including research, teaching, and meeting spaces, and a marine science business park/incubator space with offices and research laboratory space) and the area within Berths 70–71 (e.g., a wave tank and government offices). The operation of the SCMI and related research

facilities under the proposed Project would be subject to state and federal hazardous material laws. The operation of the newly planned structures associated with the proposed Project would also use similar hazardous materials during the normal course of business and would be required to comply with local, state, and federal regulations on the use, handling, and storage of these materials. Enforcement of these regulations would be performed by LACFD, Cal/OSHA, DTSC, and EPA. As mentioned in Impact RISK-1a, demolition of the Westway tanks, piping, and related structures at Berths 70–71 has been analyzed under the San Pedro Waterfront EIS/EIR and is not considered a component of the proposed Project. Remediation activities are ongoing in response to historic contamination of subsurface soil, soil vapor, groundwater, and sediment. As such, redevelopment of the Westway tanks site under the proposed Project would continue to require remediation activities in compliance with RWQCB and other applicable federal, state, regional, and local security and safety regulations, which would preclude the potential for significant impacts related to remediation of the existing site contamination. This is discussed further in Section 3.6, "Groundwater and Soils."

Impact Determination

The proposed project modifications to the existing area would not substantially increase the likelihood of an accidental hazardous material spill, release, or explosion involving people or property. The existing facilities would continue to comply with state and federal regulations regarding the use, storage, and handling of hazardous materials. Although commercial land use square footage would increase under the proposed Project, it is anticipated that daily use of hazardous materials would include small amounts of chemicals, fuels, and cleaning supplies, as well as ozone related to water treatment for the saltwater and life support systems, and other chemical treatment associated with the wave tank. All businesses operating within the proposed project boundaries would be required to comply with all applicable regulations for any hazardous material used, stored, transported, or disposed of during operations. Any accidental spill, release, or explosion would be short-term and localized due to the enforcement of these regulations. Therefore, the new and adaptive reuse development in City Dock No. 1 would not result in a substantial increase of the likelihood of a hazardous materials spill, release, or explosion due to proposed project modifications.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

RISK-6b: Operation of the proposed Project would introduce the general public to hazard(s) defined by the EPA and the Port RMP associated with offsite facilities.

Under the proposed Project, Mike's fueling station would continue operating in its existing location. It currently has five aboveground storage tanks with capacities ranging from 500 to 200,000 gallons and handles several different types of hazardous materials including clear diesel, lube oil, red dye diesel, and waste lube oil. Mike's fueling station was recently upgraded and meets all current safety codes and environmental regulations for the handling, storage, and distribution of hazardous materials (Grzesick pers. comm. 2007). These regulations are intended to reduce the risk and the consequences associated with an accidental hazardous materials release, spill, or explosion.

Furthermore, the risk associated with Mike's fueling station would continue to be less than significant. Although the facility would remain in its existing location, it would not handle hazardous materials with flashpoints below 140°F per Mitigation Measure MM RISK-1 of the San Pedro Waterfront Project EIS/EIR. The risk of an accidental spill, release, or explosion at Mike's fueling station would not increase over the existing baseline, and the risk has been reduced by mitigation required from the San Pedro Waterfront Project EIS/EIR. Therefore, with incorporation of the same mitigation, the proposed Project would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous materials.

Impact Determination

Mike's fueling station currently meets all safety and environmental standards for the handling and storing of hazardous materials and would not expand or increase its inventory of materials. Per Mitigation Measure MM RISK-1 of the San Pedro Waterfront Project EIS/EIR, products with a flashpoint below 140°F will not be permitted and Mike's fueling station will cease to handle hazardous materials with flashpoints below 140°F. With implementation of this mitigation measure, the proposed Project would not result in a substantial increase in the potential for a hazardous materials spill, release, or explosion at Mike's fueling station.

Mitigation Measures

Implement Mitigation Measure MM RISK-1.

Residual Impacts

Impacts would be less than significant.

3.7.4.3.3 Summary of Impact Determinations

Table 3.7-1 summarizes the impact determinations of the proposed Project related to hazards and hazardous materials, as described in the detailed discussion in Sections 3.7.4.3.1 and 3.7.4.3.2 above. Identified impacts may be based on federal, state, and

City significance criteria, LAHD criteria, and the conclusions of the technical reports created for the proposed Project.

For each type of impact, the table describes the impact, notes the impact determinations, describes any applicable mitigation measures, and lists the residual impacts (i.e., the impact remaining after mitigation). All impacts, both significant and less than significant, are included in this table.

Table 3.7-1. Summary Matrix of Potential Impacts and Mitigation Measures for Hazards and Hazardous Materials Associated with the Proposed Project

Environmental Impacts	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.7 HAZARDS AND HAZARDOUS MATERIALS			
Construction			
RISK-1a: Construction of the proposed Project would comply with applicable federal, state, regional, and local security and safety regulations, and Port policies guiding Port development.	No impact	No mitigation is required.	Less than significant
RISK-2a: Construction of the proposed Project would not substantially interfere with an existing emergency response or evacuation plan or require a new emergency or evacuation plan, thereby increasing the risk of injury or death.	Less than significant	No mitigation is required.	Less than significant
RISK-3a: Construction of the proposed Project would not result in a substantial increase in public health and safety concerns as a result of the accidental release, spill, or explosion of hazardous materials due to a tsunami.	Less than significant	No mitigation is required.	Less than significant
RISK-4a: Construction of the proposed Project would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous material(s) due to a terrorist action**.**	Less than significant	No mitigation is required.	Less than significant

Environmental Impacts	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
RISK-5a: Construction of the proposed Project would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous material(s) as a result of proposed project–related modifications.	Less than significant	No mitigation is required.	Less than significant
RISK-6a: Construction of the proposed Project would introduce the general public to hazard(s) defined by the EPA and the Port RMP associated with offsite facilities.	Significant	**MM RISK-1. Removal of all hazardous materials with flashpoints below 140°F from Mike's fueling station.** Mike's fueling station will cease to handle hazardous materials with flashpoints below 140°F per the letter sent from LAHD to Mike Albano dated June 16, 2008, regarding the successor permit to revocable permit No. 98-14 prior to the operation of the proposed waterfront promenade. Products with a flashpoint below 140°F will not be permitted within the project area (i.e., San Pedro Waterfront Project area). The successor permit to RP No. 98-14 to allow the operation for Mike's fueling station and continued lease of Mike's fueling station will only allow handling of products above said threshold. Prior to the operation of the waterfront promenade, Mike's fueling station will submit written confirmation identifying the complete removal of all hazardous materials on site with a flashpoint below 140°F as directed by the letter dated June 16, 2008. At the time of the written confirmation, Mike's fueling station will also provide copies of all Material Safety Data Sheets (MSDS) for each product stored in bulk on site.	Less than significant

Environmental Impacts	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
Operations			
RISK-1b: Operation of the proposed Project would comply with applicable federal, state, regional, and local security and safety regulations, and LAHD policies guiding Port development.	No impact	No mitigation is required.	No impact
RISK-2b: Operation of the proposed Project would not substantially interfere with an existing emergency response or evacuation plan or require a new emergency or evacuation plan, thereby increasing the risk of injury or death.	Less than significant	No mitigation is required.	Less than significant
RISK-3b: Operation of the proposed Project would not substantially increase the likelihood of a spill, release, or explosion of hazardous material(s) due to a tsunami.	Less than significant	No mitigation is required.	Less than significant
RISK-4b: Operation of the proposed Project would not substantially increase the likelihood of a spill, release, or explosion of hazardous material(s) due to a terrorist action.	Less than significant	No mitigation is required.	Less than significant
RISK-5b: Operation of the proposed Project would not substantially increase the likelihood of an accidental spill, release, or explosion of hazardous material(s) as a result of proposed project–related modifications.	Less than significant	No mitigation is required.	Less than significant

Environmental Impacts	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
RISK-6b: Operation of the proposed Project would introduce the general public to hazard(s) defined by the EPA and the Port RMP associated with offsite facilities.	Significant	Implement MM RISK-1.	Less than significant

3.7.4.4 Mitigation Monitoring

Table 3.7-2. Mitigation Monitoring for Hazards and Hazardous Materials

RISK-6a: Construction of the proposed Project would introduce the general public to hazard(s) defined by the EPA and the Port RMP associated with offsite facilities.	
Mitigation Measure	**MM RISK-1.** Removal of all hazardous materials with flashpoints below 140°F from Mike's fueling station.
Timing	Prior to occupancy of any buildings
Methodology	Remove hazardous materials at Mike's fueling station with flashpoints below 140°F
Responsible Parties	Mike's Marine and LAHD
Residual Impacts	None
RISK-6b: Operation of the proposed Project would introduce the general public to hazard(s) defined by the EPA and the Port RMP associated with offsite facilities.	
Mitigation Measure	Implement Mitigation Measure MM RISK-1.
Timing	Same as above
Methodology	Same as above
Responsible Parties	Same as above
Residual Impacts	None

3.7.4.5 Significant Unavoidable Impacts

No significant unavoidable impacts on hazards and hazardous materials would occur during construction or operation of the proposed Project.