

Hazards and Hazardous Materials

SECTION SUMMARY

This section characterizes the existing hazards and hazardous materials within the proposed project area and assesses how the construction and operation of the proposed Project and alternatives would alter them. This evaluation analyzes the effects of the proposed Project and alternatives on increasing the risk probability and criticality of hazardous spills or releases, risk of upset due to terrorism, and potential impact of increased truck traffic on regional injury and fatality rates. Features of the proposed Project and alternatives that could contribute to increased risks include deepening Berths 217–220 and Berths 214–216, extending the 100-foot gauge crane rail, expanding the TICTF on-dock rail, delivering and installing up to four new cranes, and making backland surface improvements.

Section 3.9, Hazards and Hazardous Materials, provides the following:

- a description of existing environmental setting in the Port area;
- a description of the existing hazards and hazardous materials stored at the proposed project site;
- a list of historic container-related hazardous spills within the Port Complex;
- a list of liquid bulk facilities close to the proposed project site;
- a description of applicable local, state, and federal regulations and policies regarding hazardous materials or hazardous substances that may require special handling if encountered during construction of the proposed Project or an alternative;
- a discussion on the methodology used to determine whether the proposed Project or alternatives would adversely change the existing physical conditions or increase the probability of hazardous spills or releases;
- an impact analysis of the proposed Project and alternatives; and
- a description of any mitigation measures proposed to reduce any potential impacts, as applicable.

Key Points of Section 3.9:

The proposed Project would increase the throughput capacity of an existing container terminal, and its operations would be consistent with other uses and container terminals in the proposed project area.

Neither the proposed Project nor any of the alternatives would result in a significant impact to hazards and hazardous materials under either CEQA or NEPA, as specified below:

- The proposed Project and alternatives would not significantly increase the risks associated with increased probability and criticality of hazardous spills or releases.

- 1 ▪ The proposed Project and alternatives would not increase the risk or frequency of potential acts of
2 terrorism.
- 3 ▪ The proposed Project and Alternative 3 would increase the throughput (TEUs) and associated
4 truck-related traffic; however, the increase is not expected to significantly increase the risk of
5 regional injury and fatality rates.

6

3.9.1 Introduction

This section addresses the potential impacts of hazards and hazardous materials on the proposed Project and alternatives, as well as potential impacts of proposed Project- and alternative-related releases of hazardous materials to the environment. This section also describes impacts on public health and safety that could result from the proposed Project or an alternative. These potential impacts include fires, explosions, and releases of hazardous materials associated with construction and operation of the proposed facilities. This section also addresses potential effects of the release of hazardous materials associated with tsunami-induced flooding and other seismic events. The potential risks of inundation associated with tsunami-related flooding are discussed in Section 3.5, Geology.

Potential health and safety impacts associated with encountering contaminated soil and groundwater during construction are discussed in Section 3.8, Groundwater and Soils.

3.9.2 Environmental Setting

3.9.2.1 Hazardous Materials

Hazardous materials are the raw materials for a product or process that may be classified as toxic, flammable, corrosive, or reactive. Classes of hazardous materials that may be transported at the Port include:

- 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 as A, B, or C explosives.
- 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, and contamination and are capable of violent decomposition or autoreaction but which are not designed primarily as an explosive.
- Radioactive materials: those materials that undergo spontaneous emission of radiation from decaying atomic nuclei.
- Water-reactive materials: those materials that react violently or dangerously upon exposure to water or moisture.

Hazardous materials that are transported in containers are stored in individual containers specifically manufactured for storing and transporting the material. In addition, shipping companies prepare, package, and label hazardous materials shipments in accordance with federal requirements (49 CFR 170–179) to facilitate surface transport of the containers. All hazardous materials in containers are required to be properly manifested. Hazardous material manifests for inbound containerized hazardous materials are reviewed and approved by the Port Security and the City Fire Department before they can be unloaded.

1 Containers of hazardous materials are transported from the terminal via truck. While in
2 the Port, they are only handled by authorized workers. The Transportation Worker
3 Identification Credential (TWIC) program is a Transportation Security Administration
4 (TSA) and United States Coast Guard (USCG) initiative to provide a tamper-resistant
5 biometric security credential to (1) maritime workers who require unescorted access to
6 secure areas of Port facilities and vessels regulated under the Maritime Transportation
7 Security Act of 2003 (MTSA) and (2) all USCG-credentialed merchant mariners. To
8 obtain a TWIC, an individual must provide biographic and biometric information such as
9 fingerprints, sit for a digital photograph, and successfully pass a security threat
10 assessment conducted by TSA. The TWIC program reduces the potential for
11 unauthorized handling of containers that contain hazardous materials.

12 As indicated by the National Response Center's (NRC's) 2009–2012 data, there have
13 been several minor releases of hazardous materials from containers or other sources
14 within the Port (NRC 2013).¹ No deaths have resulted from releases of hazardous
15 materials at the Port, and no injuries associated with accidental releases of hazardous
16 materials have been reported at hazardous liquid bulk storage facilities closest to the
17 proposed project site, which are those located across the East Basin Channel and the
18 Cerritos Channel to the north (identified further in this section).

19 The California Office of Emergency Services maintains the Response Information
20 Management System database, which includes detailed information on all reported
21 hazardous material spills in California and corresponds to the NRC data. All spills that
22 occur in the Port, both hazardous and nonhazardous, are reported to the California Office
23 of Emergency Services and entered into the database. This database includes spills that
24 may not result in a risk to the public but could be considered to be an environmental
25 hazard.

26 The historical hazardous material spill notification databases available on the Governor's
27 Office of Emergency Services website were evaluated from 2009 to 2012 for the number
28 of spills (greater than 10 gallons) that have occurred at ships/port/harbor and waterways
29 in the cities of Los Angeles, San Pedro, Terminal Island, and Wilmington, in the County
30 of Los Angeles. The data indicated approximately 35 hazardous material spills known to
31 be greater than 10 gallons had occurred between 2009 and 2012 (California Emergency
32 Management Agency 2013).² The spills include fuel and other spills from vessels
33 serving the terminals. During this period, the total throughput of the container terminals
34 at the Port of Los Angeles was 30,599,122 TEUs (POLA 2013). Therefore, the
35 probability of a spill involving a hazardous material at the container terminals can be
36 estimated at 1.14×10^{-6} per TEU (35 spills divided by 30,599,122 TEUs). This spill
37 probability is a conservative estimate because it includes materials that would not be
38 considered a risk to public safety (e.g., food grease) but would still be considered an
39 environmental hazard.

¹ The NRC is the federal government's national communications center, which is staffed 24 hours a day by USCG officers and marine science technicians. The NRC is the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the U.S. and its territories. The NRC's spill data for 1982 through 2012 are available at: <http://www.nrc.uscg.mil/download.html>

² If unknown spill quantities are taken into consideration, the number of hazardous material spills greater than 10 gallons and of unknown quantities increases to 53 spills between 2009 and 2012. In an attempt to be more definitive while calculating the risk of spills, only spills that were known to be greater than 10 gallons have been considered while estimating spill probability.

1 There are no bulk liquid facilities adjacent to the proposed project site. The closest bulk
 2 liquid facilities are operated by Shell Oil at Berths 167—169 across the East Basin
 3 Channel approximately 0.2 mile north of the proposed project site, and by Vopak Liquid
 4 Bulk Terminal at Berths 187–191, approximately 0.2 miles across Cerritos Channel to the
 5 north of the proposed project site.

6 The YTI Terminal is a small quantity generator (greater than 100 kilogram but less than
 7 1,000 kilogram hazardous waste per month) for Resource Conservation and Recovery
 8 Act (RCRA) hazardous wastes, and a large quantity generator (greater than 1,000
 9 kilogram hazardous waste per month) for non-RCRA hazardous wastes (California waste
 10 only) (LAFD 2012b). Table 3.9-1 presents the wastes generated at the proposed project
 11 site in 2012. In addition to the hazardous and nonhazardous wastes presented in the
 12 table, universal wastes are also generated; however, these are recycled (Hansen pers.
 13 comm.).

Table 3.9-1: Berths 212–224 [YTI] Hazardous and Nonhazardous Wastes Generated in 2012

	Annual Total	Estimated Monthly Average	Average Shipment Size
Hazardous Waste	815 gal 6,997 lbs	67.9 gal 583.1 lbs	45.3 gal 368.3 lbs
Nonhazardous Waste	8,915 gal 76,070 lbs	742.9 gal 6,339.2 lbs	1,114.4 gal 5,433.6 lbs

Note: The quantity of each actual shipment varies. The data presented in this table an average calculate by dividing the 2012 total waste amounts by 12 months and the number of shipments for hazardous and nonhazardous wastes.

lbs = pounds; gal = gallons

Source: Hansen pers. comm.

14
 15 Hazardous and nonhazardous waste volumes are not expected to increase much over time
 16 and YTI would continue to comply with all applicable federal, state, and local laws,
 17 ordinances, regulations, and standards related to hazardous and nonhazardous materials
 18 and wastes.

19 The proposed project site includes several facilities that contain small amounts of
 20 hazardous material and/or hazardous wastes (see Table 3.9-2). Gasoline and diesel are
 21 stored on site in two aboveground storage tanks (ASTs), each with a capacity of 12,060
 22 gallons. The fuel dispensing system on the gasoline AST is covered by, and permitted
 23 annually under, Air Quality Management District Rule 461. YTI holds a 2012 permit and
 24 submitted application funds for the 2013 permit in July 2013 (Hansen pers. comm.). In
 25 compliance with the EPA’s regulations on Oil Pollution Prevention (40 CFR 110 and
 26 112), YTI maintains a Spill Prevention, Control, and Countermeasures (SPCC) Plan³

³ Oil Pollution Prevention (40 CFR Parts 110 and 112) regulations specifically require facilities that use and/or store oil or petroleum products in quantities exceeding 1,320 gallons aggregate aboveground or 42,000 underground storage to prepare a SPCC Plan that details the design and operation of the facility to prevent, control, and provide countermeasures to a discharge of oil. In addition, the State of California has issued regulations via the Aboveground Petroleum Storage Act (Sections 25270 through 25270.13 of the Health and Safety Code) that parallel the federal regulations. The requirements do not apply to containers less than 55 gallons in capacity or oil stored or used on vehicles related to transportation (other than those used exclusively within the boundaries of the facility).

1 (Hansen pers. comm.). In addition, in compliance with Section 25270.6 of the
 2 Aboveground Petroleum Storage Act, YTI submits an annual tank facility statement to
 3 the Certified Unified Program Agency that lists key information regarding the facility and
 4 the oil materials present at the site (LAFD 2012a). YTI has also submitted a Hazardous
 5 Material Business Plan to the Los Angeles County Fire Department in accordance with
 6 California Health and Safety Code Chapter 6.95 Section 25504 (b) and 19 CCR Section
 7 2729–2732 and has prepared a Stormwater Pollution Prevention Plan (SWPPP) in
 8 accordance with California National Pollutant Discharge Elimination System (NPDES)
 9 permit CAS000001 for stormwater discharges associated with industrial activities (LAFD
 10 2012b; Hansen pers. comm.).

11 YTI contracts Asbury Environmental Services in Compton and Safety-Kleen Systems,
 12 Inc. in Santa Ana for transportation of hazardous and nonhazardous wastes generated
 13 from on-site operations. In 2012, hazardous and nonhazardous waste disposal services
 14 were also provided by two additional companies: Siemens Industry, Inc. in Los Angeles
 15 and Demenno-Kerdoon in Compton. In the event of a spill, Patriot Environmental
 16 Services of Wilmington would serve as first responders to the proposed project site for
 17 cleanup operations (Hansen pers. comm.).

Table 3.9-2: Facilities Containing Potentially Hazardous Materials and Hazardous Wastes at Berths 212–224 (YTI) Container Terminal

Chemical Location	Chemical Stored (Hazardous Components)	Quantity Stored Average Daily/ Maximum Daily Amounts	Hazardous Material	Hazardous Waste
Power shop, chassis shop, crane shop canopy, and mobile vans	Acetylene	2,950/3,500 cf	Yes	No
Power shop	Antifreeze (ethylene glycol)	200/225 gal	Yes	Yes
Power Shop	Antifreeze (waste) (ethylene glycol)	60/120 gal	Yes	Yes
Power shop, chassis shop, crane shop, and M&R Vans	Armakleen™ 4 in 1 Cleaner cleaning solution (sodium carbonate, sodium hydroxide, fatty acids C8, propylene glycol, and polyethoxylated alcohols)	55/100 gal	Yes	No
Power shop	Argon and carbon dioxide mixture	2,000/3,500 cf	Yes	No
West end of chassis shop	Firefighting foam concentrate (Chemguard 3% AFFF C-303) (propylene glycol t-butyl ether, magnesium sulfate, proprietary hydrocarbon surfactant, and proprietary fluorosurfactant)	110 gal	Yes	No
AST and three fuel trucks east of power shop and two emergency generators at facility entrance	Diesel (diesel fuel and naphthalene)	9,000/17,436 gal	Yes	No

Table 3.9-2: Facilities Containing Potentially Hazardous Materials and Hazardous Wastes at Berths 212–224 (YTI) Container Terminal

Chemical Location	Chemical Stored (Hazardous Components)	Quantity Stored Average Daily/ Maximum Daily Amounts	Hazardous Material	Hazardous Waste
Power shop	Drive train fluid (highly refined mineral oil and zinc dialkyl dithiophosphate)	75/120 gal	Yes	No
Administration building—2 nd floor	Fire extinguishing agent (FM-200) (Heptafluoropropane and HFC 227ea)	253 lbs	Yes	No
AST and two fuel trucks east of power shop	Gasoline (gasoline, benzene, n-Butane, ethyl alcohol, and n-Hexane)	7,000/13,284 gal	Yes	No
Crane shop and power shop	Gear oil (highly refined mineral oil and zinc dialkyl dithiophosphate)	200/340 gal	Yes	No
Crane shop and power shop	Hydraulic oil (distillates, petroleum, solvent, light, and heavy paraffin; proprietary ingredients; and zinc alkyldithiophosphate)	450/725 gal	Yes	No
Crane shop, power shop, and chassis shop	Motor oil (highly refined petroleum distillates, zinc compounds, and polymer additives)	850/1,295 gal	Yes	No
Crane shop, power shop, and chassis shop	Waste oil (highly refined petroleum distillates, zinc compounds, and polymer additives)	500/1,000 gal	Yes	No
Crane shop, power shop, chassis shop, and M&R Vans	Oxygen	3,000/6,000 cf	Yes	No
End of wash rack	Propane	350/495 lbs	Yes	No
Power shop and chassis shop	Transmission fluid (highly refined mineral oil and zinc dialkyl dithiophosphate)	350/260 gal	Yes	No

Source: LAFD 2012b.

Notes: cf = cubic feet; lbs = pounds; gal = gallons

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2 3.9.2.2 Public Emergency Services

3 Emergency response/fire protection for the Port is provided by the Los Angeles City
4 Fire Department (LAFD). Landside and waterside security is provided primarily by the
5 Los Angeles Port Police (Port Police), in addition to the USCG and Los Angeles Police
6 Department (LAPD). Fireboat companies and land-based fire stations are located in the
7 proposed project vicinity, and fire stations equipped with fire trucks are also located in

1 the Port and nearby in the communities of Wilmington and San Pedro. Section 3.13,
2 Public Services, provides further details regarding emergency response services.

3 Additionally, the West Coast and Alaska Tsunami Warning Center operates the federal
4 data collection and warning system for tsunami hazards in its area of responsibility,
5 which includes the west coast of the U.S., Alaska, Atlantic Ocean and seaboard, Puerto
6 Rico, Virgin Islands, Gulf of Mexico coastal areas, and the east and west coasts of
7 Canada. The center collects seismic data from various seismic networks throughout its
8 area of responsibility (NOAA 2011a).⁴ These data are processed, automatically and
9 interactively, to quickly determine the tsunami potential of an earthquake, and bulletins
10 are issued based initially on this first analysis of seismic data. If a tsunami could be
11 generated, sea level data, tsunami models, and historical tsunami information are
12 analyzed to estimate impact level (NOAA 2011b; National Tsunami Hazard Mitigation
13 Program and NOAA 2010).⁵

14 The West Coast and Alaska Tsunami Warning Center issues tsunami warnings within 10
15 minutes of an earthquake occurrence when a potentially tsunami-producing earthquake is
16 greater than 7.0 on the Richter scale in the Pacific area of responsibility. Warnings also
17 may be issued when potentially tsunami-producing earthquakes (greater than 7.5) outside
18 the area of responsibility occur and are likely to affect it. The geographic extent of the
19 warning is based on the size of the earthquake, tsunami travel times throughout the area
20 of responsibility, and expected impact zones (NOAA 2011a).

21 The center broadcasts tsunami bulletins and warnings through standard National Weather
22 Service dissemination methods such as National Oceanic and Atmospheric
23 Administration (NOAA) Weather Radio All Hazards, the Emergency Alert System, and
24 the Emergency Managers Weather Information Network. State emergency service
25 agencies receive the message through the Federal Emergency Management Agency's
26 National Warning System and the NOAA Weather Wire Service. The states immediately
27 pass warnings to local jurisdictions (NOAA 2011a). The USCG also relays the message
28 via radio. The Safety Element of the City's General Plan identifies the entire Port as an
29 area that could be affected by a tsunami, as well as the areas south/southwest of the Main
30 Channel, including the proposed project site, and potential inundation areas (City of Los
31 Angeles Planning Department 1996). LAHD has a Port-wide emergency notification
32 system in place to warn of tsunamis and other emergency situations by
33 telephone/email/text alerts (Malin pers. comm. 2011).

34 YTI maintains a written Emergency Action Plan that adopts procedures under the
35 existing safety programs and combines them with governmental Emergency Action Plan
36 criteria for operations at YTI. The plan involves training and routine drills and exercises.
37 All employees are expected to follow the Emergency Action Plan in preventing or
38 responding to emergency circumstances.

⁴ The West Coast and Alaska Tsunami Warning Center's website provides detailed information related to tsunami warning and disaster preparedness and is available at: <http://wcatwc.arh.noaa.gov/faq/frequently.php>.

⁵ Additional information pertaining to tsunami data and information is available through NOAA's National Weather Service and the NOAA National Geophysical Data Center websites at: <http://nthmp.tsunami.gov/media-corner/guidebook.php> and <http://www.ngdc.noaa.gov/hazard/tsu.shtml>, respectively.

3.9.2.3 Homeland Security

Terrorism Risk

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 NEPA, and not analyzed. The climate of the world today has 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 site; therefore, the probability component of the analysis contains a considerable amount of uncertainty. Nonetheless, this fact does not invalidate the analysis presented 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 those events is described herein.

Application of Risk Principles

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 certain measures, such as emergency response preparations.

Terrorism Risk Associated with Port Cargo Facilities

Port facilities could be subject to terrorist actions from the land, air, or water, and there could be attempts to disrupt cargo operations through various types of actions. The cargo facilities in the Port are the locations where cargo moving through the international supply chain is transferred between vessels and land transportation (either over the road tractor-trailers or railroad). Port terminals are generally not seen as iconic themselves. However, because port functions are critical to the international supply chain and, therefore, to the U.S. economy, it is possible that these facilities could be targeted for terrorist actions. During operational periods, people on these terminals are generally limited to terminal staff members, longshore workers, and truck drivers. There is no public access to these terminals.

Terrorism Risk Associated with Commercial Vessels

Commercial vessels in the Port could be subject to terrorist action while at berth or during transit. These vessels could be subject to several types of actions, including an attack from the land, air, surface of the water, or beneath the surface of the water. During their transit in the Port, some vessels (especially larger vessels) are highly restricted in their maneuverability.

Container ships are not attractive targets in terms of loss of life or producing large fires and explosions; rather, an attack on a container ship would likely be economic in nature and designed to disrupt Port operations. A catastrophic attack on a vessel in Port waters could block key channels and disrupt commerce, thus resulting in potential economic losses.

1 **Terrorism Risk Associated with Containerized Cargo**

2 Containerized cargo represents a substantial segment of maritime commerce and is the
3 focus of much of the attention regarding seaport security. Containers are used to
4 transport a wide variety of goods. A large container ship can carry anywhere between
5 5,000 and 18,000 containers, several hundred of which might be offloaded at a given
6 port. Once offloaded from ships, containers are transferred to rail cars or tractor-trailers.

7 Intermodal cargo containers could be used to transport a harmful device into the Port.
8 This could include a weapon of mass destruction, or a conventional explosive device.
9 The likelihood of such an attack would be based on the desire to cause harm to the Port.
10 The probability of an attack would have no relationship to project-related throughput.
11 The potential environmental effects of such an action, if it resulted in release of
12 hazardous material, would be akin to the accidental release of hazardous materials that
13 are addressed herein.

14 Additionally, the use of cargo containers to smuggle weapons of mass destruction
15 through the Port with the intention to harm another location, such as a highly populated
16 and/or economically important region, is another possible use of a container by a terrorist
17 organization. However, the likelihood of such an event would not be connected to
18 project-related throughput, but would rather be based on the terrorists' desired outcome.
19 Cargo containers represent only one of many potential methods to smuggle weapons of
20 mass destruction and, with current security initiatives, may be less desirable than other
21 established smuggling routes (e.g., land-based ports of entry, cross-border tunnels, illegal
22 vessel transportation).

23 **3.9.2.4 Security Measures at the Port of Los Angeles**

24 Numerous security measures have been implemented in the Port in the wake of the
25 terrorist attacks of September 11, 2001. Federal, state, and local agencies, as well as
26 private industry, have implemented and coordinated many security operations and
27 physical security enhancements. The result is a layered approach to Port security that
28 includes the security program of LAHD and the existing YTI Terminal.

29 **Security Regulations**

30 MTSA resulted in maritime security regulations in 33 CFR 101–106. These regulations
31 apply to cargo terminals in the Port, including at the YTI Terminal. Title 33 Part 105
32 requires that cargo terminals meet minimum security standards for physical security,
33 access control, cargo handling security, and interaction with berthed vessels. These
34 regulations require that terminal operators submit a Facility Security Plan to the USCG
35 Captain of the Port for review and approval prior to conducting cargo operations. The
36 requirements for submission of the security plans became effective on December 31,
37 2003. Operational compliance was required by July 1, 2004.

38 The International Ship and Port Facility Security (ISPS) Code was adopted by the
39 International Maritime Organization in 2003. This code requires both ships and ports to
40 conduct vulnerability assessments and to develop security plans with the purpose of
41 preventing and suppressing terrorism against ships, improving security aboard ships and
42 ashore, and reducing risk to passengers, crew, and port personnel on board ships and in
43 port areas, for vessels and cargo. The ISPS Code applies to all cargo vessels 300 gross

1 tons or larger and ports servicing those regulated vessels, and it is very similar to the
2 MTSA regulations.

3 USCG is responsible for enforcement of the MTSA and ISPS Code regulations discussed
4 above. Due to the parallel nature of the MTSA and ISPS requirements, compliance with
5 the MTSA is tantamount to compliance with the ISPS. If either the terminal or a vessel
6 berthed at the terminal is found to be in noncompliance with these security regulations,
7 the USCG may not permit cargo operations and the terminal and/or vessel operators may
8 be subject to fines. In accordance with its responsibilities for land-based security under
9 33 CFR 105, the USCG may impose additional control measures related to security.

10 In July 2005, the Port Tariff was modified to require all Port terminals subject to MTSA
11 regulations to fully comply with these regulations, and to provide the Port with a copy of
12 their approved Facility Security Plan.

13 **YTI Container Terminal Security Measures**

14 Security at YTI is conducted in accordance with an existing Facility Security Plan that
15 was approved on April 28, 2008 by the Captain of the Port for Sector Los Angeles-Long
16 Beach. The facility perimeter is defined by a fence line and dock face. The facility is
17 defined as a Secure Area.

18 As part of the Facility Security Plan, YTI uses required Maritime Security (MARSEC)
19 Access Control Measures. MARSEC Levels are designed to easily communicate to the
20 USCG and maritime industry partners any pre-planned scalable responses for credible
21 threats. If the Secretary of Homeland Security issues a National Terrorism Advisory
22 System Alert, the Commandant of the USCG would adjust the MARSEC Level, if
23 appropriate, based on the commensurate risk, any maritime nexus, and/or Commandant
24 consultation with the Secretary of Homeland Security.

25 MARSEC Levels are set to reflect the prevailing threat environment to the marine
26 elements of the national transportation system, including ports, vessels, facilities, and
27 critical assets and infrastructure located on or adjacent to waters subject to the
28 jurisdiction of the U.S. MARSEC Levels apply to vessels, USCG-regulated facilities
29 inside the U.S., and the USCG.

- 30 ▪ MARSEC Level 1 means the level for which minimum appropriate security
31 measures are maintained at all times.
- 32 ▪ MARSEC Level 2 means the level for which appropriate additional protective
33 security measures are maintained for a period of time as a result of heightened
34 risk of a transportation security incident.
- 35 ▪ MARSEC Level 3 means the level for which further specific protective security
36 measures are maintained for a limited period of time when a transportation
37 security incident is probable, imminent, or has occurred, although it may not be
38 possible to identify the specific target.

39 MARSEC Level 1 generally applies in the absence of a National Terrorism Advisory
40 System Alert or when the Commandant determines that the alert is not applicable to the
41 Marine Transportation System. If an alert is applicable, the Commandant would consider
42 a MARSEC Level change for the maritime industry, USCG, or both.

Vessel Security Measures

All cargo vessels 300 gross tons or larger that are flagged by International Maritime Organization signatory nations adhere to the ISPS Code standards discussed in the Security Regulations section above. These requirements include:

- 1) Ships must develop security plans that address monitoring and controlling access; monitoring the activities of people, cargo, and stores; and ensuring the security and availability of communications.
- 2) Ships must have a Ship Security Officer.
- 3) Ships must be provided with a ship security alert system. These systems transmit ship-to-shore security alerts to a competent authority designated by the Flag State Administration, which may communicate the company name, identify the ship, establish its location, and indicate that the ship security is under threat or has been compromised. For the west coast, this signal is received by the Coast Guard Pacific Area Command Center in Alameda.
- 4) International port facilities that ships visit must have a security plan, including focused security for areas having direct contact with ships.
- 5) Ships may have certain equipment on board to help maintain or enhance the physical security of the ship, including:
 - a. monitoring and controlling access;
 - b. monitoring the activities of people and cargo;
 - c. ensuring the security and availability of communications; and
 - d. completing a Declaration of Security signed by the Facility Security Officer and Ship Security Officer that ensures that areas of security overlapping between the ship and facility are adequately addressed.

Vessels flagged by nations that are not International Maritime Organization signatory are subject to special USCG vessel security boarding prior to entering port.

Security Credentialing

The TWIC program is a TSA and USCG initiative that includes issuance of a tamper-resistant biometric credential to maritime workers requiring unescorted access to secure areas of Port facilities and vessels regulated under the MTSA. The TWIC program minimizes the potential for unauthorized handling of containers that contain hazardous materials and provides additional shoreside security at the terminal. In order to obtain a TWIC, an individual must successfully pass a security threat assessment conducted by TSA. This assessment includes a criminal history check and a citizenship or immigration status check of all applicants. The Port is currently involved in initial implementation of the TWIC program, including a series of field tests at selected Port terminals.

Cargo Security Measures

U.S. Customs and Border Protection (CBP) is the federal agency with responsibility for the security of cargo being shipped into the U.S. CBP is the lead agency for screening and scanning cargo that is shipped through the Port. Neither the YTI Terminal nor LAHD have responsibilities related to security scanning or screening of cargo entering

1 the Port. However, the Port Police may inspect cargo if there is probable cause on a case-
2 by-case basis.

3 CBP conducts several initiatives related to security of the supply chain. Through the
4 Container Security Initiative program, CBP inspectors pre-screen U.S.-bound marine
5 containers at foreign ports prior to loading aboard vessels bound for U.S. ports. The
6 Customs Trade Partnership Against Terrorism offers importers expedited processing of
7 their cargo if they comply with CBP measures for securing their entire supply chain.
8 Details of CBP cargo security programs can be found at the CBP's website:
9 <http://cbp.gov/>.

10 **Port of Los Angeles Security Initiatives**

11 In 2012, the Port of Los Angeles adopted a five-year Strategic Plan for 2012–2017
12 (POLA 2012), which focuses on three key result areas: competitive operations, strong
13 relationships, and financial strength. In support of one of the strategic objectives
14 identified in this plan, “increase stakeholder and community awareness and support,” the
15 plan includes two initiatives related to strengthening security measures. These are:

16 *Initiative 4*

17 Enhance the passage of critical information between the Port and local
18 stakeholders through enhanced use of Web media.

19 **Metric:** Develop a “See Something, Say Something” iWatch-type interactive
20 Web site that fosters more collaboration and real-time communication and
21 notification capability between Port Police, the ILWU workforce, community
22 members and other stakeholders who have a role or interest in Port safety and
23 security.

24 *Initiative 5*

25 Provide hands-on training in areas such as security and emergency response.

26 **Metric:** Provide six classes per year for ILWU, two classes per year for facility
27 security officers and terminal personnel, and four classes per year for
28 community members in FY 2012/13, FY 2013/14 and FY 2014/15 respectively.

29 **3.9.3 Applicable Regulations**

30 **3.9.3.1 List of Regulations**

31 Regulations applicable to the proposed Project or alternatives are designed to regulate
32 hazardous materials and hazardous wastes. These regulations also are designed to limit
33 the risk of upset during the use, transport, handling, storage, and disposal of hazardous
34 materials. Additionally, as described earlier, numerous security measures have been
35 implemented in the Port area in the wake of the terrorist actions of September 11, 2001.
36 Although LAHD is responsible for the overall protection of the proposed project area, as
37 well as reviewing tenant security operations, each tenant is individually and specifically
38 required to comply with federal and state security and emergency regulations, which are
39 enforced by agencies such as the USCG and LAFD. The proposed Project would be

1 subject to numerous federal, state, and local laws and regulations including, but not
2 limited to, those described below.

3 **Resource Conservation and Recovery Act of 1976 (42 U.S.C. 4 Section 6901–6987)**

5 The goal of RCRA, a federal statute passed in 1976, is the protection of human health and
6 the environment, the reduction of waste, the conservation of energy and natural
7 resources, and the elimination of the generation of hazardous waste as expeditiously as
8 possible. The Hazardous and Solid Waste Amendments of 1984 significantly expanded
9 the scope of RCRA by adding new corrective action requirements, land disposal
10 restrictions, and technical requirements. The corresponding regulations in 40 CFR 260–
11 299 provide the general framework for managing hazardous waste, including
12 requirements for entities that generate, store, transport, treat, and dispose of hazardous
13 waste.

14 **Comprehensive Environmental Response, Compensation, and 15 Liability Act**

16 The Comprehensive Environmental Response, Compensation, and Liability Act
17 (CERCLA), commonly known as Superfund, was enacted in 1980 to respond directly to
18 releases or threatened releases of hazardous substances that may endanger public health
19 or the environment. CERCLA established prohibitions and requirements concerning
20 closed and abandoned hazardous waste sites; provided for liability of persons responsible
21 for releases of hazardous waste at these sites; and established a trust fund to provide for
22 cleanup when no responsible party could be identified. The corresponding regulation in
23 42 CFR 103 provides the general framework for response actions and managing
24 hazardous waste.

25 **Department of Transportation Hazardous Materials Regulations 26 (49 CFR 100–185)**

27 The U.S. Department of Transportation (USDOT) Hazardous Materials Regulations
28 cover all aspects of hazardous materials packaging, handling, and transportation. Parts
29 172 (Emergency Response), 173 (Packaging Requirements), 174 (Rail Transportation),
30 176 (Vessel Transportation), 177 (Highway Transportation), 178 (Packaging
31 Specifications), and 180 (Packaging Maintenance) apply to existing operations at the YTI
32 Terminal and would apply to the proposed project operations.

33 **The Hazardous Materials Transportation Act, 49 CFR 171, 34 Subchapter C**

35 The USDOT, FHWA, and the Federal Railroad Administration regulate transportation of
36 hazardous materials at the federal level. The Hazardous Materials Transportation Act
37 requires that carriers report accidental releases of hazardous materials to USDOT at the
38 earliest practical moment. Other incidents that must be reported include deaths, injuries
39 requiring hospitalization, and property damage exceeding \$50,000.

40 **United States Coast Guard Title 33**

41 The USCG, through Title 33 (Navigation and Navigable Waters) and Title 46 (Shipping)
42 of the CFR, is the federal agency responsible for vessel inspection, marine terminal

1 operations safety, coordination of federal responses to marine emergencies, enforcement
2 of marine pollution statutes, marine safety (such as navigation aids), and operation of the
3 National Response Center for spill response, and is the lead agency for offshore spill
4 response. The USCG implemented a revised vessel-boarding program in 1994 designed
5 to identify and eliminate substandard ships from U.S. waters. The program pursues this
6 goal by systematically targeting the relative risk of vessels and increasing the boarding
7 frequency on high risk (potentially substandard) vessels. The relative risk of each vessel
8 is determined through the use of a matrix that factors the flag of the vessel, owner,
9 operator, classification society, vessel particulars, and violation history. Vessels are
10 assigned a boarding priority from I to IV, with priority I vessels being the potentially
11 highest risk and priority IV having relatively low risk. The USCG is also responsible for
12 reviewing marine terminal Operations Manuals and issuing Letters of Adequacy upon
13 approval.

14 **Hazardous Waste Control Law, California Health and Safety** 15 **Code, Chapter 6.5**

16 This statute is the basic hazardous waste law for California. The Hazardous Waste
17 Control Law implements the federal RCRA cradle-to-grave waste management system in
18 California. California hazardous waste regulations can be found in 22 CCR 4.5,
19 Environmental Health Standards for the Management of Hazardous Wastes. The
20 program is administered by the California Department of Toxic Substances Control.

21 **Emergency Planning and Community Right-To-Know Act** 22 **(42 U.S.C. 11001 et seq.)**

23 Also known as Title III of the Superfund Amendments and Reauthorization Act, the
24 Emergency Planning and Community Right-to-Know Act was enacted by Congress as
25 the national legislation on community safety. This law was designated to help local
26 communities protect public health, safety, and the environment from chemical hazards.
27 To implement this act, Congress required each state to appoint a State Emergency
28 Response Commission. These commissions are required to divide their states into
29 Emergency Planning Districts and to name a Local Emergency Planning Committee for
30 each district. The act provides requirements for emergency release notification, chemical
31 inventory reporting, and toxic release inventories for facilities that handle chemicals.

32 **Hazardous Material Release Response Plans and Inventory Law** 33 **(California Health and Safety Code, Chapter 6.95)**

34 California's "right-to-know law" requires businesses to develop a Hazardous Material
35 Management Plan or a business plan for hazardous materials emergencies if they handle
36 more than 500 pounds, 55 gallons, or 200 cubic feet of hazardous materials. In addition,
37 the business plan includes an inventory of all hazardous materials stored or handled at the
38 facility above these thresholds. This law is designed to reduce the occurrence and
39 severity of hazardous materials releases. The Hazardous Materials Management Plan or
40 business plan must be submitted to the Certified Unified Program Agency, which is, in
41 this case, LAFD. The state has integrated the federal Emergency Planning and
42 Community Right-to-Know Act reporting requirements into this law, and, once a facility
43 is in compliance with the local administering agency requirements, submittals to other
44 agencies are not required. In the event of an emergency, operators at the YTI Terminal

1 have a Hazardous Materials Business Plan in place to facilitate effective and safe
2 management of any release.

3 **Aboveground Storage of Petroleum**

4 California Health and Safety Code, Chapter 6.67 regulates construction, installation,
5 operation, and monitoring of aboveground petroleum storage tanks. This law is designed
6 to prevent release of hazardous materials into the environment by either leakage from
7 tanks and associated pipelines or from overfilling and spillage. As such, the program
8 works to reduce the occurrence of hazardous material releases.

9 **Los Angeles Municipal Code (Fire Protection: Chapter 5, 10 Section 57, Divisions 4 and 5)**

11 These portions of the municipal fire code regulate the construction of buildings and other
12 structures used to store flammable hazardous materials, and the storage of these same
13 materials. These sections ensure that the business is properly equipped and operates in a
14 safe manner and in accordance with all applicable laws and regulations. These permits
15 are issued by LAFD.

16 **Los Angeles Municipal Code (Public Property: Chapter 6, 17 Article 4)**

18 This portion of the municipal code regulates the discharge of materials into the sanitary
19 sewer and storm drains. It requires the construction of spill-containment structures to
20 prevent the entry of forbidden materials, such as hazardous materials, into sanitary sewers
21 and storm drains.

22 **Port of Los Angeles Risk Management Plan**

23 The Risk Management Plan (RMP), an element of the Port Master Plan, was adopted in
24 1983, in accordance with California Coastal Commission requirements. The purpose of
25 the RMP is to provide siting criteria relative to vulnerable resources and the handling and
26 storage of potentially hazardous cargo such as crude oil, petroleum products, and
27 chemicals. The RMP provides guidance for future development of the Port designed to
28 minimize or eliminate the hazards to vulnerable resources from accidental releases. As
29 part of the Port Master Plan Update in 2013, the Port updated and incorporated the RMP
30 as Chapter 8 of the Port Master Plan (POLA 2013). Although the applicability of the
31 proposed Project or alternative with this Plan would be limited—as the plan pertains
32 primarily to marine terminals that accept crude oil, petroleum products, and chemicals,
33 rather than container terminals—the proposed Project is consistent with the existing and
34 Draft Port RMP and does not pose significant risks.

35 **Emergency Response and Evacuation Plans**

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

39 The City of Los Angeles Emergency Preparedness Department provides citywide
40 emergency leadership, continuity, and direction to enable the City and all of its various
41 departments and divisions to respond to, recover from, and mitigate the impact of natural,

1 human-made, or technological disasters upon its people or property (EMD 2013). The
2 department has prepared a City of Los Angeles Emergency Operations Organization
3 Manual that describes the organization, responsibilities, and priorities of all City
4 departments and local agencies in case of an emergency (EOO 2006). The manual is
5 maintained by the Emergency Preparedness Department and is organized by type of
6 emergency as well as by the City departments that are responsible for responding to
7 certain emergencies. The manual includes the following sections applicable to the Port
8 area:

- 9 ▪ LAHD Plan,
- 10 ▪ Hazardous Materials Annex, and
- 11 ▪ Tsunami Response Plan Annex.

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

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

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

26 The Hazardous Materials Annex contains information regarding the chain of command
27 and the general organization of any response to a hazardous material release anywhere in
28 the City, including the Port area (EOO 1993). It includes an emergency checklist for
29 LAHD to follow should a hazardous materials release occur within the Port area. The
30 checklist identifies specific pre-event, response, and recovery action items and identifies
31 the respective LAHD divisions (i.e., Port Police) that are responsible for carrying out the
32 action items.

33 The Tsunami Response Plan Annex identifies the Port area as a Tsunami Inundation
34 Zone and outlines policies and procedures of nine different City departments (including
35 LAHD, LAPD, LAFD, and EMD) in the event of a tsunami (EOO 2007). The Tsunami
36 Response Plan identifies evacuation routes for the San Pedro area and the harbor area and
37 specifies evacuation locations to which evacuees should retreat. The plan identifies that
38 the mission of LAHD with respect to a tsunami is to provide employees, tenants, and the
39 public with a safe, well-planned, and organized method of evacuating the Port district. It
40 outlines several actions that the Port Police are responsible for, including following the
41 established evacuation checklist, evacuating the affected Tsunami Inundation Zone, and

1 activating notification procedures. The divisional organization and basic functions that
2 would support the Tsunami Response Plan for the Port area are consistent with LAHD's
3 emergency plan and procedures.

4 The City and LAHD have adopted the Standardized Emergency Management System to
5 manage responses to multi-agency and multi-jurisdiction emergencies and facilitate
6 communications and coordination among all levels of the system and among all
7 responding agencies. Additionally, the City currently uses a new emergency
8 management process that incorporates Homeland Security's National Incident
9 Management System and Incident Command System and the application of standardized
10 procedures and preparedness measures (Malin pers. comm. 2011).

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

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

22 **3.9.3.2 Other Requirements**

23 California regulates the management of hazardous wastes through Health and Safety
24 Code Section 25100 et seq., and through 22 CCR 4.5, Environmental Health Standards
25 for the Management of Hazardous Wastes, as well as 26 CCR, Toxics.

26 The Safety Element of the City of Los Angeles General Plan addresses the issue of
27 protection of its people from unreasonable risks associated with natural disasters
28 (e.g., fires, floods, and earthquakes) (City of Los Angeles 1996). The Safety Element
29 provides a contextual framework for understanding the relationship between hazard
30 mitigation, response to a natural disaster, and initial recovery from a natural disaster.

31 The transport of hazardous materials in containers on the street and highway system is
32 regulated by Caltrans procedures and the Standardized Emergency Management System
33 prescribed under Section 8607 of the California Government Code. Compliance with
34 other federal, state, and local laws and regulations (e.g., driver training and licensing and
35 Caltrans packaging requirements) govern transport of cargo on the street and highway
36 system and during rail transport. The shippers package the hazardous materials in the
37 containers and provide labeling in compliance with Caltrans requirements.

38 Numerous facilities handle, store, or transport hazardous materials in the Port. Activities
39 that involve hazardous liquid bulk cargoes (e.g., fuels) at the Port are governed by the
40 Port of Los Angeles RMP, which is now part of the updated Port Master Plan (POLA
41 2013). The RMP helps measure and control the risks inherent in handling and storing
42 hazardous cargoes within the Port. The policies of this plan are intended to be used in
43 siting and expanding hazardous cargo facilities relative to high density populations and

1 critical impact facilities (i.e., vulnerable resources). This plan provides for a
2 methodology for assessing and the potential risks of the storage and transfer of hazardous
3 commodities occurring at liquid bulk terminals within the Port.

4 Hazardous materials inside cargo containers fall under the primary jurisdiction of the
5 federal Department of Homeland Security and USCG (33 CFR 126) while the containers
6 are at sea, in Port waters, and at waterfront facilities. Under the jurisdiction of the
7 Department of Homeland Security, the USCG maintains an Office of Operating and
8 Environmental Standards Division, which develops national regulations and policies on
9 marine environmental protection. This division coordinates with appropriate federal,
10 state, and international organizations to minimize conflicting environmental
11 requirements. The USCG also maintains a Hazardous Materials Standards Division
12 (HMSD), which develops standards and industry guidance to promote the safety of life
13 and protection of property and the environment during marine transportation of
14 hazardous materials. This includes transportation of bulk liquid chemicals and liquefied
15 gases, hazardous bulk solids, and packaged hazardous cargoes, as well as hazardous
16 materials used as ship stores and hazardous materials used for shipboard fumigation of
17 cargo.

18 The Vessel Traffic Service (VTS) is a public/private partnership service for the Ports of
19 Los Angeles and Long Beach. VTS is jointly operated and managed by the Marine
20 Exchange of Southern California (a nonprofit corporation) and the USCG Captain of the
21 Port. VTS is a cooperative effort of the State of California, USCG, Marine Exchange of
22 Southern California, and Ports of Los Angeles and Long Beach, and is under the
23 authority of California Government Code, Section 8670.21, Harbors and Navigation
24 Code, Sections 445–449.5 and the port tariffs of Los Angeles and Long Beach.

25 Terminal cargo operations involving hazardous materials are governed by LAFD in
26 accordance with regulations of state and federal departments of transportation
27 (49 CFR 176). Regulated hazardous materials in the Port may include maritime-use
28 compounds, such as chlorinated solvents, petroleum products, compressed gases, paints,
29 cleaners, and pesticides.

30 The risk of terrorism and any resultant environmental effects, when such risks are
31 relevant and reasonably foreseeable, must be considered during preparation of
32 environmental documents under NEPA (U.S. Court of Appeals for the 9th Circuit in
33 *San Luis Obispo Mothers for Peace, et al. v. Nuclear Regulatory Commission*
34 [449 F.3d 1016 (9th Cir. 2006)]). The decision by the court held that the risk of terrorist
35 attack was within the foreseeable chain of causation and dealt with likely *physical* effects
36 of that terrorism.

37 **3.9.4 Impacts and Mitigation Measures**

38 **3.9.4.1 Methodology**

39 **Risk Probability and Criticality**

40 The NEPA and CEQA guidelines require identifying any adverse change in any of the
41 physical conditions in the area affected by the proposed Project or alternatives, including
42 a change in the probability of spills or releases of hazardous materials. For incidents that
43 may affect environmental health and public safety, a risk matrix is commonly used to

1 evaluate the expected frequencies of scenarios versus the severity of potential
 2 consequences to determine the level of significance (see Table 3.9-3). The potential for
 3 significant safety impacts increases proportionally to the frequency of occurrence and
 4 potential consequences of an event. Frequency is typically classified into six categories
 5 (frequent, periodical, occasional, possible, improbable, and extraordinary) based on a
 6 predefined expected level of occurrence. The severity of consequence is classified into
 7 five categories (negligible, minor, major, severe, and disastrous) based on the potential
 8 environmental and safety impact on the public.

Table 3.9-3: Risk Matrix

Probability

		Extraordinary > 1,000,000 years	Improbable > 10,000 < 1,000,000 years	Possible > 100 < 10,000 years	Occasional > 10 and < 100 years	Periodic > 1 and < 10 years	Frequent (> 1 year)
Consequences	Catastrophic (> 100 severe injuries, more than 10 fatalities or >357,142 bbls)	4	3	2	1	1	1
	Severe (up to 100 severe injuries, up to 10 fatalities, or 2,380–357,142 bbls)	4	3	3	2	2	2
	Moderate (up to 10 severe injuries or 238–2,380 bbls)	4	4	3	3	3	3
	Slight (a few minor injuries or 10–238 bbls)	4	4	4	4	4	4
	Negligible (no minor injuries or <10 bbls)	4	4	4	4	4	4

Note: Incidents that fall in the dark-shaded area of the risk matrix (with cell entries of 1 and 2) would be classified as significant in the absence of mitigation, while the lighter-shaded areas (with cell entries of 3) would be significant in the absence of engineering and/or administrative controls. Unshaded areas (with cell entries of 4) would be considered less than significant.

bbl = barrel that is 42 gallons.

Sources: LACFD 1991; Santa Barbara County 1995; Aspen Environmental Group 1996.

9
 10 Table 3.9-3 specifies values in each category of consequence and frequency classification
 11 typically used in the industry. Incidents that fall in the shaded area of the risk matrix
 12 would be classified as significant, unless, for the lighter shaded areas, there are
 13 engineering and/or administrative controls in place. The risk matrix approach follows the
 14 Los Angeles County Fire Department (LACFD) risk management guidelines that were
 15 originally developed for the California Risk Management and Prevention Program
 16 (RMPP) and also include the criticality classifications presented in Table 3.9-4 (LACFD
 17 1991). The RMPP used the combination of accident frequency and consequences to

1 define the significance of a potential accident in terms of impacts on public safety (i.e.,
 2 potential injuries and/or fatalities). Santa Barbara County added additional criteria to
 3 address the significance of oil spills and environmental hazards, which for the proposed
 4 Project or alternatives would include fuel spills from container ships (Santa Barbara
 5 County 1995). The potential significance of impacts on public safety and the
 6 environment are evaluated using the risk matrix approach. The extent of environmental
 7 damage is evaluated in the relevant issue areas (e.g., biological resources, water quality).

Table 3.9-4: Criticality and Frequency Classifications

Criticality Classification		
Classification	Description of Public Safety Hazard	Environmental Hazard—Oil Spill Size
Negligible	No significant risk to the public, with no injuries	Less than 10 bbls (420 gal)
Slight	At most a few minor injuries	10–238 bbls (420–10,000 gal)
Moderate	Up to 10 severe injuries	238–2,380 bbls (10,000–100,000 gal)
Severe	Up to 100 severe injuries or up to 10 fatalities	2,380–357,142 bbls (100,000–15,000,000 gal)
Catastrophic	More than 100 severe injuries or more than 10 fatalities	Greater than 357,142 bbls (15,000,000 gal)
Frequency Classification		
Classification	Frequency per Year	Description of the Event
Extraordinary	Less than once in 1,000,000 years	Has never occurred but could occur.
Improbable	Between once in 10,000 and once in 1,000,000 years	Occurred on a worldwide basis, but only a few times. Not expected to occur.
Possible	Between once in 100 and once in 10,000 years	Is not expected to occur during the project lifetime.
Occasional	Between once in 10 and once in 100 years	Would probably occur during the project lifetime.
Periodic	Between once per year and once in 10 years	Would occur about once a decade.
Frequent	Greater than once in a year	Would occur once in a year on average.
Sources: Santa Barbara County 1995; Aspen Environmental Group 1996.		

8
 9 The risk criticality matrix shown in Table 3.9-4 combines accidental probability with the
 10 severity of consequences to identify the risk criticality. Four categories of risk have been
 11 defined by LACFD (2012):

- 12 1) Critical. Mitigate within 6 months with administrative or engineering controls
 13 (to reduce the Risk Code to 3 or less).
- 14 2) Undesirable. Mitigate within 1 year with administrative or engineering controls
 15 (to reduce the Risk Code to 3 or less).

1 3) Acceptable. Verify need for engineering controls, or that administrative controls
2 are in place for hazard.

3 4) Acceptable. No mitigating action required for the identified hazard.

4 The risk criticality matrix was originally developed for use in evaluating the probability
5 and significance of a release of acutely hazardous materials under the requirements of
6 Section 25532(g) of the Health and Safety Code, and has been modified over the years to
7 include other environmental and public safety hazards.

8 **Risk of Upset Due to Terrorism**

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

19 **Hazards Associated with Truck Transportation**

20 The proposed Project/alternative-related increases in truck trips could result in an
21 increase in vehicular accidents, injuries, and fatalities. Therefore, potential impacts from
22 increased truck traffic on regional injury and fatality rates have been evaluated.

23 The Federal Motor Carrier Safety Administration (FMCSA), within USDOT, operates
24 and maintains the Motor Carrier Management Information System (MCMIS). MCMIS
25 contains information on the safety fitness of commercial motor carriers and hazardous
26 material shippers subject to FMCSA Regulations and 49 CFR (Parts 171.8, 172, 173.403,
27 173.8, and 397.101) Hazardous Materials Regulations. As part of these requirements,
28 reportable accident rates are generated for various types of carriers, including carriers of
29 hazardous materials. More than 500,000 motor carriers are included in the database,
30 approximately 40,000 of which carry hazardous materials. A USDOT-reportable
31 accident is an accident that produces either a fatality or a hospitalization, or requires the
32 vehicle be towed.

33 The Hazardous Materials Information System is another system of databases managed by
34 the Office of Hazardous Materials Safety within USDOT. The database maintains
35 information on transportation-related hazardous material incidents.

36 According to an FMCSA detailed analysis (FMCSA 2001), the estimated nonhazardous
37 materials truck accident rate is more than twice the hazardous materials truck accident
38 rate. The nonhazardous materials truck accident rate was estimated to be 0.73 accident
39 per million vehicle miles, and the average hazardous materials truck accident rate was
40 estimated to be 0.32 accident per million vehicle miles.

41 Based on the National Highway Traffic Safety Administration (NHTSA 2008), of the
42 estimated 380,000 truck crashes in 2008 (causing fatalities, injuries, or property damage),
43 an estimated 1.07% (4,066 truck crashes) produced fatalities and 17.4% (66,000 truck

1 crashes) produced injuries. The Fatality Analysis Reporting System and the Trucks
2 Involved in Fatal Accidents survey were the sources of data for this analysis, which
3 primarily examines fatalities associated with vehicle impact and trauma.

4 **CEQA Baseline**

5 Section 15125 of the CEQA Guidelines requires EIRs to include a description of the
6 physical environmental conditions in the vicinity of a project that exist at the time of the
7 NOP. These environmental conditions normally would constitute the baseline physical
8 conditions by which the CEQA lead agency determines if an impact is significant. The
9 NOP for the proposed Project was published in April 2013. For purposes of this Draft
10 EIS/EIR, the CEQA baseline takes into account the throughput for the 12-month calendar
11 year preceding NOP publication (January through December 2012) in order to provide a
12 representative characterization of activity levels throughout the complete calendar year
13 preceding release of the NOP. In 2012, the YTI Terminal encompassed approximately
14 185 acres under its long-term lease, supported 14 cranes (10 operating), and handled
15 approximately 996,109 TEUs and 162 vessel calls. The CEQA baseline conditions are
16 also described in Section 2.7.1 and summarized in Table 2-1.

17 The CEQA baseline represents the setting at a fixed point in time. The CEQA baseline
18 differs from the No Project Alternative (Alternative 1) in that the No Project Alternative
19 addresses what is likely to happen at the proposed project site over time, starting from the
20 existing conditions. Therefore, the No Project Alternative allows for growth at the
21 proposed project site that could be expected to occur without additional approvals,
22 whereas the CEQA baseline does not.

23 **NEPA Baseline**

24 For purposes of this Draft EIS/EIR, the evaluation of significance under NEPA is defined
25 by comparing the proposed Project or other alternative to the NEPA baseline. The NEPA
26 baseline conditions are described in Section 2.7.2 and summarized in Table 2-1. The
27 NEPA baseline condition for determining significance of impacts includes the full range
28 of construction and operational activities the applicant could implement and is likely to
29 implement absent a federal action, in this case the issuance of a USACE permit.

30 Unlike the CEQA baseline, which is defined by conditions at a point in time, the NEPA
31 baseline is not bound by statute to a “flat” or “no-growth” scenario. Instead, the NEPA
32 baseline is dynamic and includes increases in operations for each study year (2015, 2016,
33 2017, 2020, and 2026), which are projected to occur absent a federal permit. Federal
34 permit decisions focus on direct impacts of the proposed Project to the aquatic
35 environment, as well as indirect and cumulative impacts in the uplands determined to be
36 within the scope of federal control and responsibility. Significance of the proposed
37 Project or the alternatives under NEPA is defined by comparing the proposed Project or
38 the alternatives to the NEPA baseline.

39 The NEPA baseline, for purposes of this Draft EIS/EIR, is the same as the No Federal
40 Action Alternative. Under the No Federal Action Alternative (Alternative 2), no
41 dredging, dredged material disposal, in-water pile installation, or crane
42 installation/extension would occur. Expansion of the TICTF and extension of the crane
43 rail would also not occur. The No Federal Action Alternative includes only backlands
44 improvements consisting of slurry sealing, deep cold planning, asphalt concrete overlay,
45 restriping, and removal, relocation, or modification of any underground conduits and

1 pipes necessary to complete repairs. These activities do not change the physical or
2 operational capacity of the existing terminal.

3 The NEPA baseline assumes that by 2026 the terminal would handle up to approximately
4 1,692,000 TEUs annually, accommodate 206 annual ships calls at two berths, and be
5 occupied by 14 cranes (10 operating).

6 **3.9.4.2 Thresholds of Significance**

7 Criteria for determining the significance of impacts related to hazards and hazardous
8 materials are based on the *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006) and
9 federal and state standards, regulations, and guidelines. The proposed Project or an
10 alternative would have a significant impact related to hazards and hazardous materials if:

11 **RISK-1:** It would substantially increase the probable frequency and severity of
12 consequences to people or property as a result of a potential accidental release
13 or explosion of a hazardous substance, as defined in Tables 3.9-3 and 3.9-4.

14 **RISK-2:** It would substantially increase the probable frequency and severity of
15 consequences to people from exposure to health hazards, as defined in Tables
16 3.9-3 and 3.9-4.

17 **RISK-3:** It would substantially interfere with an existing emergency response or
18 evacuation plan, thereby increasing risk of injury or death, as defined in
19 Tables 3.9-3 and 3.9-4.

20 **RISK-4:** It would not comply with applicable regulations and policies governing
21 hazardous materials and activities at the Port.

22 **RISK-5:** Proposed Project- or alternative-related terminal modifications would result in
23 an increased probability of an accidental spill as a result of a tsunami-induced
24 flooding or other seismic event.

25 **RISK-6:** Proposed Project- or alternative-related terminal modifications would result in
26 a measurable increase in the probability of a terrorist attack, which would
27 result in adverse consequences to the proposed project site and nearby areas.

28 **3.9.4.3 Impact Determination**

29 **Proposed Project**

30 **Impact RISK-1: The proposed Project would not substantially**
31 **increase the probable frequency and severity of consequences to**
32 **people or property as a result of an accidental release or explosion**
33 **of a hazardous substance.**

34 ***Construction***

35 Construction activities would be conducted using best management practices (BMPs) in
36 accordance with City guidelines, as detailed in the *Development Best Management*
37 *Practices Handbook—Part A, Construction Activities* (City of Los Angeles 2004) and the
38 Los Angeles Municipal Code regulations (Chapter 5, Section 57, Divisions 4 and 5;

1 Chapter 6, Article 4). Federal and state regulations that govern the storage of hazardous
2 materials in containers (i.e., the types of materials and the size of packages containing
3 hazardous materials) and the separation of containers holding hazardous materials would
4 confine the potential adverse impacts of contamination to a relatively small area.
5 Standard BMPs would be used during construction activities to minimize runoff of
6 contaminants and clean up any spills, in compliance with the State General Permit for
7 Storm Water Discharges Associated with Construction Activity (Construction General
8 Permit Order 2009-0009-DWQ) and the proposed Project-specific SWPPP that has been
9 prepared in accordance with California NPDES permit CAS000001 2013 (Hansen pers.
10 comm.). Further, BMPs would be implemented at Berths 214–216 and 217–220 during
11 dredging and disposal of the dredged material. Some of the applicable BMPs as listed in
12 the *Development Best Management Practices Handbook—Part A, Construction*
13 *Activities*, include, but are not limited to: training of personnel; proper vehicle and
14 equipment fueling and maintenance to prevent fluids (such as oil, hydraulic fluid,
15 lubricants, or brake fluids) from leaking; proper material delivery, storage, and use to
16 prevent discharge of pollutants; Spill Prevention, Control, and Countermeasure plans to
17 manage spills; management of solid and hazardous wastes; and management of
18 contaminated soil.

19 Implementation of the aforementioned construction standards would minimize the
20 potential for an accidental release of petroleum products or hazardous materials and
21 explosion during construction activities at the proposed project site. In addition to
22 prevention measures, construction standards include procedures designed to effectively
23 and efficaciously clean up spills and immediately implement remedial actions. It is
24 unlikely that construction activities would involve the use of substantial quantities of
25 hazardous materials, and the most likely source of these materials would be from vehicles
26 at the site. There could be small amounts of hazardous materials used to support dredge
27 operations; however, these materials would be confined to the barge. Thus, the most
28 likely spills or releases of hazardous materials during construction would involve
29 petroleum products, such as diesel fuel, gasoline, oils, and lubricants. Because
30 construction-related spills are not uncommon, the probability of a spill occurring is
31 classified as “frequent” (more than once a year). However, such spills are typically short-
32 term and localized. This is attributable to the fact that the volume in any single source
33 vehicle is generally less than 50 gallons, and fuel trucks that might be present at the site
34 would be limited to 10,000 gallons or less. Thus, the potential consequence of such
35 accidents is classified as “slight,” resulting in a Risk Code of 4, which is “acceptable.”
36 However, there is also potential for release of contaminated soils from dredging
37 approximately 27,000 cubic yards at Berths 214–216 and Berths 217–220. All of the
38 dredged material would be disposed of at an approved site, which may include LA-2, the
39 Berths 243–245 confined disposal facility (CDF), or another approved location. A
40 sampling and analysis program would be implemented to determine suitability for any
41 offshore disposal of material at LA-2. In addition, any contaminated soil or groundwater
42 encountered during construction of the proposed Project would be handled, transported,
43 remediated, or disposed of in accordance with all applicable federal, state, and local laws
44 and regulations and in accordance with the regulatory lead agency (e.g., DTSC,
45 LARWQCB) and LAHD mitigation measures pertaining to site remediation (GW-1) and
46 development of a contamination contingency plan (GW-2) (see Section 3.8, Groundwater
47 and Soils).

Operation

YTI Terminal operations would be subject to safety regulations that govern the shipping, transport, storage, and handling of hazardous materials, which would limit the severity and frequency of potential releases of hazardous materials resulting in increased exposure of people to health hazards (i.e., Port RMP, USCG, and LAFD regulations and requirements, and USDOT regulations). For example, as discussed in Section 3.9.3.1, List of Regulations, and summarized below, the USCG maintains an HMSD, under the jurisdiction of the federal Department of Homeland Security (33 CFR 126), which develops standards and industry guidance to promote the safety of life and protection of property and the environment during marine transportation of hazardous materials. In addition, USDOT Hazardous Materials Regulations (Title 49 CFR 100–185) regulate almost all aspects of terminal operations. Parts 172 (Emergency Response), 173 (Packaging Requirements), 174 (Rail Transportation), 176 (Vessel Transportation), 177 (Highway Transportation), 178 (Packaging Specifications) and 180 (Packaging Maintenance) would all apply to the proposed project activities.

YTI Terminal operations involving hazardous materials are also governed by LAFD in accordance with regulations of state and federal departments of transportation (49 CFR 176). The transport of hazardous materials in containers on the street and highway system is regulated by Caltrans procedures and the Standardized Emergency Management System prescribed under Section 8607 of the California Government Code. These safety regulations strictly govern the storage of hazardous materials in containers (i.e., types of materials and size of packages containing hazardous materials). Implementation of increased hazardous materials inventory control and spill prevention controls associated with these regulations would limit both the frequency and severity of potential releases of hazardous materials.

Terminal maintenance activities would involve the use of hazardous materials such as petroleum products, solvents, paints, and cleaners. 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). Implementation of increased inventory accountability and spill prevention controls associated with the RRP and HMI would limit both the frequency and severity of potential releases of hazardous materials. Limited quantities of hazardous materials used at the terminal that are below the thresholds of Chapter 6.95 would not likely result in a substantial spillage into the environment. However, it is expected that the projected increase in terminal operations under the proposed Project would proportionally increase the potential for an accidental release or explosion of hazardous materials.

As stated above in Section 3.9.2.1, the probability of a spill at a container terminal has been estimated at 1.14×10^{-6} per TEU (35 spills over 4 years [2009 to 2012] divided by 30,599,122 TEUs, which is the total throughput of the container terminals at the Port of Los Angeles over the same 4-year period [2009 to 2012]). This means that for every 874,000 TEUs, a spill is probable. This spill probability conservatively represents the baseline hazardous material spill probability because it includes materials that would not be considered a risk to public safety (e.g., food grease), but would still be considered an environmental hazard. The probability of spills associated with future operations would be based on the spill probability per TEU times the increase in TEUs under the proposed Project.

1 **CEQA Impact Determination**

2 **Construction**

3 As discussed above, construction would not substantially increase the probable frequency
 4 and severity of consequences to people or property as a result of an accidental release or
 5 explosion of a hazardous substance and impacts would be less than significant under
 6 CEQA.

7 **Operation**

8 In 2012, the YTI Terminal handled 996,109 TEUs. With build-out of the proposed
 9 Project, operations would rise to approximately 1,913,000 TEUs per year when
 10 functioning at maximum capacity (in 2026). This would equate to an almost 2-fold
 11 increase in throughput capacity over CEQA baseline conditions, thereby proportionally
 12 increasing the potential for an accidental release or explosion of hazardous materials.

13 Based on the estimated probability of a spill at a container terminal of 1.14×10^{-6} per
 14 TEU, the frequency of proposed project-related spills can be estimated as shown in Table
 15 3.9-5.

Table 3.9-5: Proposed Project: Existing and Projected Cargo Throughput Volumes at YTI Terminal

Operations	Overall Throughput (TEUs)	Increase in TEUs (%)	Potential Spills (per year)
CEQA Baseline*	996,109	NA	1.1
Proposed Project (2026)	1,913,000	92 %	2.2

Note:
 *CEQA Baseline: January 2012—December 2012
 TEU = 20-foot equivalent unit

16 Based on the projected increase in TEUs, the frequency of potential proposed Project-
 17 related spills would increase to 2.2 spills per year from 1.1 spills under the baseline,
 18 which equates to an increase in the number of annual spills by 1.1 under the proposed
 19 Project. This spill frequency would be classified as “frequent” (greater than once per
 20 year). Based on history, a slight possibility exists for injury and/or property damage to
 21 occur during one of these frequent accidents; therefore, the potential consequence of such
 22 accidents is classified as “slight,” resulting in a Risk Code of 4, which is “acceptable.”
 23 Compliance with applicable federal, state, and local laws and regulations governing the
 24 transport of hazardous materials and emergency response to hazardous material spills, as
 25 described above, would minimize the potential for adverse public health impacts.
 26 Therefore, under CEQA, proposed project operations would not substantially increase the
 27 probable frequency and severity of consequences to people or property as a result of a
 28 potential accidental release (including spill from vessels) or explosion of a hazardous
 29 substance. Impacts would be less than significant under CEQA.

31 **Mitigation Measures**

32 No mitigation is required.

1 **Residual Impacts**

2 Impacts would be less than significant.

3 **NEPA Impact Determination**

4 **Construction**

5 As discussed above, construction would not substantially increase the probable frequency
6 and severity of consequences to people or property as a result of an accidental release or
7 explosion of a hazardous substance. Impacts would be less than significant under NEPA.

8 **Operation**

9 Under the NEPA baseline, the YTI terminal could handle up to approximately
10 1,692,000 TEUs by year 2026. Operation of the proposed Project would handle
11 approximately 1,913,000 TEUs per year when functioning at maximum capacity (in
12 2026). This would equate to a more than 1.1-fold increase in throughput capacity over
13 NEPA baseline conditions.

14 Based on the estimated probability of a spill at a container terminal of 1.14×10^{-6} per
15 TEU, the frequency of proposed Project-related spills can be estimated as shown in Table
16 3.9-6.

Table 3.9-6: Proposed Project: Existing and Projected Cargo Throughput Volumes at YTI Terminal

Operations	Overall Throughput (TEUs)	Increase in TEUs (%)	Potential Spills (per year)
NEPA Baseline (2026)	1,692,000	NA	1.9
Proposed Project (2026)	1,913,000	13.1 %	2.2

Note:
TEU = 20-foot equivalent unit

17
18 Based on the projected increase in TEUs, the frequency of potential proposed Project-
19 related spills would increase to 2.2 spills per year from 1.9 spills under the baseline,
20 which equates to an increase in the number of annual spills by 0.3 under the proposed
21 Project. This increase in spill frequency would be classified as “periodic” (between once
22 per year and once in ten years). Based on history, a slight possibility exists for injury and
23 or property damage to occur during one of these frequent accidents; therefore, the
24 potential consequence of such accidents is classified as “slight,” resulting in a Risk Code
25 of 4, which is “acceptable.” Compliance with applicable federal, state, and local laws
26 and regulations governing the transport of hazardous materials and emergency response
27 to hazardous material spills, as described above, would minimize the potentials for
28 adverse public health impacts. Therefore, under NEPA, proposed project operations
29 would not substantially increase the probable frequency and severity of consequences to
30 people or property as a result of a potential accidental release (including spill from
31 vessels) or explosion of a hazardous substance. Impacts would be less than significant
32 under NEPA.

33 **Mitigation Measures**

34 No mitigation is required.

1 **Residual Impacts**

2 Impacts would be less than significant.

3 **Impact RISK-2: The proposed Project would not substantially**
4 **increase the probable frequency and severity of consequences to**
5 **people from exposure to health hazards.**

6 **Construction**

7 Construction activities would be conducted using BMPs in accordance with City
8 guidelines, as detailed in the *Development Best Management Practices Handbook—Part*
9 *A, Construction Activities* (City of Los Angeles 2004), and the Los Angeles Municipal
10 Code (Chapter 5, Section 57, Divisions 4 and 5; Chapter 6, Article 4). Quantities of
11 hazardous materials that exceed the thresholds provided in Chapter 6.95 of the California
12 Health and Safety Code would be subject to an RRP and an HMI. Implementation of
13 increased inventory accountability and spill prevention controls associated with the RRP
14 and HMI, such as limiting the types of materials stored and size of packages containing
15 hazardous materials, would limit both the frequency and severity of potential releases of
16 hazardous materials, thus minimizing potential health hazards and/or contamination of
17 soil or water during construction activities. These measures would reduce the frequency
18 and consequences of spills by requiring proper packaging for the material being shipped,
19 limits on package size and thus potential spill size, and proper response measures for the
20 materials being handled. Impacts from contamination of soil or water during
21 construction activities would apply to not only construction personnel, but to people and
22 property occupying operational portions of the proposed project area, because Berths
23 212–213 and Berths 214–216 would remain in operation during Phase I, and Berths 212–
24 213 and the newly improved Berths 217–220 would be in operation during Phase II of
25 construction.

26 Construction activities would include dredging, transport, and disposal of materials from
27 Berths 214–216 and Berths 217–220. Approximately 27,000 cubic yards of sediments
28 would be removed, which would be disposed of at an approved site, which may include
29 LA-2, the Berths 243–245 CDF, or another approved location. A sampling and analysis
30 program would be implemented to determine suitability for any offshore disposal of
31 material at LA-2.

32 During construction, hazardous materials shipped to and within the Port could be released
33 in the event a ship is involved in an accident with a dredge or during dredging activities,
34 which could pose a threat to the public. However, hazardous materials shipped,
35 transported, handled, or otherwise stored would be in compliance with the RMP, USCG
36 regulations, fire department requirements, and state and federal departments of
37 transportation regulations (49 Part 176).

38 Implementation of these preventative measures would minimize the potential for spills to
39 affect members of the public, including on-site employees, and confine the adverse
40 impacts of contamination to a relatively small area.

41 **Operation**

42 The proposed Project would include siting facilities that would potentially handle
43 hazardous materials and increase other hazards to the public. These hazards would

1 include the similar containerized hazardous materials that were handled at the proposed
2 project site under existing conditions, but the volume of hazardous materials under the
3 proposed Project would increase proportionally with the increase in TEU throughput
4 (relative to existing conditions). Likewise, the increased throughput volume would
5 increase the chance of a fire or explosion at the terminal, as well as hazards associated
6 with container transportation. The handling and storing of increased quantities of
7 hazardous materials would increase the probability of a local accident involving a release,
8 spill, fire, or explosion, which would be proportional to the size of the terminal and its
9 throughput as addressed in Impact RISK-1.

10 However, it is expected that the projected increase in terminal operations under the
11 proposed Project would proportionally increase the potential truck transportation-related
12 accidents. Potential proposed Project-related increases in truck trips could result in an
13 increase in vehicular accidents, injuries, and fatalities. Therefore, potential impacts of
14 increased truck traffic on regional injury and fatality rates are evaluated.

15 According to an FMCSA detailed analysis (FMCSA 2001), the estimated nonhazardous
16 materials truck accident rate is more than twice the hazardous materials truck accident
17 rate. The nonhazardous materials truck accident rate was estimated to be 0.73 accident
18 per million vehicle miles, and the average hazardous materials truck accident rate was
19 estimated to be 0.32 accident per million vehicle miles. The hazardous materials truck
20 accident rate is not directly applicable to the proposed Project-related container trucks
21 because such trucks are generally limited to bulk hazardous material carriers. Therefore,
22 to conduct a conservative analysis, the higher accident rate associated with nonhazardous
23 materials trucks was used.

24 Based on the NHTSA (NHTSA 2008), of the estimated 380,000 truck crashes in 2008
25 (causing fatalities, injuries, or property damage), an estimated 1.07% (4,066 truck
26 crashes) produced fatalities and 17.4% (66,000 truck crashes) produced injuries.

27 **CEQA Impact Determination**

28 ***Construction***

29 Because construction-related spills are not uncommon, the probability of a spill occurring
30 is classified as “frequent” (more than once a year). However, because such spills are
31 typically short-term, localized, and small (less than 10 gallons) (FSEL 2006), the
32 potential consequence of such accidents is classified as “slight,” resulting in a Risk Code
33 of 4, which is “acceptable.” Therefore, construction activities, including dredging
34 activities at Berths 214–216 and Berths 217–220 and the associated disposal, would not
35 substantially increase the probable frequency and severity of consequences to people
36 from exposure to health hazards. Impacts would be less than significant under CEQA.

37 ***Operation***

38 Because projected terminal operations under the proposed Project would accommodate
39 approximately a 1.9-fold increase in containerized cargo compared to the CEQA
40 baseline, the potential for increased truck transportation-related accidents would also
41 occur.

42 Potential proposed Project-related truck accident rates can be estimated based on national
43 average accident rates and the average number of miles per cargo truck trip. Based on
44 the air pollutant emission inventory of the Port, it was determined that the average truck

1 trip was approximately 50.4 miles (Starcrest 2013). Given the annual number of truck
 2 trips, the average distance of each trip, and the published accident, injury, and fatality
 3 rates, probabilities were estimated as shown in Table 3.9-7.

Table 3.9-7: Proposed Project: Existing and Projected Truck Trips at YTI Terminal Relative to CEQA Baseline

Operations	Annual Truck Trips	Accident Rate (per year)	Injury Probability (per year)	Fatality Probability (per year)
CEQA Baseline (2012)	901,762	33.18	5.77	0.36
Proposed Project (2026)	1,308,342	48.14	8.38	0.52
Increase over CEQA Baseline Conditions	406,580	14.96	2.60	0.16

Note: numbers are rounded

4
 5 LAHD has fully implemented its Clean Truck Program, which involved phasing out older
 6 trucks. In addition, the federal TWIC program will help identify and exclude truck
 7 drivers who lack the proper licensing and training. The phasing out of older trucks would
 8 reduce the probability of accidents that occur as a result of mechanical failure by
 9 approximately 10% (ADL 1990). Proper driver training, or more specifically the
 10 reduction in the number of drivers who do not meet minimum training specifications,
 11 would further reduce potential accidents. This would further result in fewer injury and/or
 12 fatality conditions.

13 Because the occurrence of truck accidents associated with the proposed Project could
 14 occur at a frequency greater than one per year, truck accidents are considered a
 15 “frequent” event. As noted in Table 3.9-7, the possibility for increased injury and/or
 16 fatality to occur relative to CEQA baseline conditions is approximately 2.76 (2.60 injury
 17 probability + 0.16 fatality probability). The consequence of such accidents is classified
 18 as “moderate” because it is less than 10, resulting in a Risk Code of 3. According to the
 19 LACFD risk criticality (see Table 3.9-4), an impact with a Risk Code of 3 is classified as
 20 “acceptable” with additional engineering or administrative controls to mitigate the
 21 adverse impacts.

22 The potential total injuries and fatality probability relative to the baseline would be
 23 reduced with administrative controls, which would not reduce the consequence
 24 classification or Risk Code. Due the implementation of administrative controls, proposed
 25 project operations would not substantially increase the probable frequency and severity of
 26 consequences to people from exposure to health hazards. Therefore, potential impacts
 27 under CEQA would be considered less than significant.

28 **Mitigation Measures**

29 No mitigation is required.

30 **Residual Impacts**

31 Impacts would be less than significant.

NEPA Impact Determination

Construction

Because construction-related spills are not uncommon, the probability of a spill occurring is classified as “frequent” (more than once a year). However, because such spills are typically short-term localized, and small (less than 10 gallons) (FSEL 2006), the potential consequence of such accidents is classified as “slight,” resulting in a Risk Code of 4, which is “acceptable.” Therefore, construction activities, including dredging activities at Berths 214–216 and Berths 217–220 and the associated disposal, would not substantially increase the probable frequency and severity of consequences to people from exposure to health hazards. Impacts would be less than significant under NEPA.

Operation

Because projected terminal operations under the proposed Project would accommodate approximately a 1.1-fold increase in containerized cargo compared to the NEPA baseline, the potential for increased truck transportation-related accidents would also occur.

Potential proposed Project-related truck accident rates can be estimated based on national average accident rates and the average number of miles per cargo truck trip. Based on the air pollutant emission inventory of the Port, it was determined that the average truck trip was approximately 50.4 miles (Starcrest 2013). Given the annual number of truck trips, the average distance of each trip, and the published accident, injury and fatality rates, probabilities were estimated as shown in Table 3.9-8.

Table 3.9-8: Proposed Project: Existing and Projected Truck Trips at YTI Terminal Relative to NEPA Baseline

Operations	Annual Truck Trips	Accident Rate (per year)	Injury Probability (per year)	Fatality Probability (per year)
NEPA Baseline (2026)	1,184,069	43.56	7.58	0.47
Proposed Project (2026)	1,308,342	48.14	8.38	0.52
Increase over NEPA Baseline Conditions	124,273	4.57	0.80	0.05

Note: numbers are rounded

Compared to NEPA baseline conditions, the proposed Project would result in a negligible change in injury and/or fatality of 0.85 (0.80 injury probability + 0.05 fatality probability), as noted in Table 3.9-8. The consequence of such accidents is classified as “negligible” because the probable number of injuries is less than 1, which equates to a Risk Code of 4. An impact with a Risk Code of 4 is classified as “acceptable” and would be less than significant. Therefore, potential impacts under NEPA would be considered less than significant.

Mitigation Measures

No mitigation is required.

1 ***Residual Impacts***

2 Impacts would be less than significant.

3 **Impact RISK-3: The proposed Project would not substantially**
4 **interfere with an existing emergency response or evacuation plan,**
5 **thereby increasing the risk of injury or death.**

6 ***Construction***

7 Emergency response and evacuation planning is a shared responsibility among LAPD,
8 LAFD, Los Angeles Port Police, and USCG. In addition, as stated earlier in this section,
9 YTI has an Emergency Action Plan in place for its employees, to help prevent and
10 respond to emergency situations when they arise. Proposed project construction would
11 occur completely within YTI's lease premises and is not expected to interfere with
12 emergency responses or evacuation plans. As a standard procedure for activities
13 occurring on Port property and within the Port area, the contractor would coordinate with
14 the agencies responsible for the emergency response and evacuation planning: LAPD,
15 LAFD, Port Police, and USCG. Construction activities would be subject to emergency
16 response and evacuation systems implemented by LAFD.

17 During construction activities, LAFD would require that adequate vehicular access to the
18 proposed project site and vicinity be provided and maintained. Prior to commencement
19 of construction activities, all plans would be reviewed by LAFD to ensure adequate
20 access is maintained throughout construction. Traffic control equipment would be in
21 place to direct local traffic around the work area. During proposed project construction,
22 emergency access would be maintained to all surrounding facilities. The proposed
23 Project would incorporate planning to ensure that possible interference with emergency
24 response and evacuation plans does not occur. As such, emergency access to these sites
25 would not be adversely impacted during construction.

26 ***Operation***

27 The proposed Project would optimize terminal operations by improving the existing
28 terminal. The proposed terminal operations would not interfere with any existing
29 contingency plans, because the terminal improvements and related terminal operations
30 would be confined to the proposed project site. Furthermore, current activities are
31 consistent with the contingency plans, and the proposed Project would not add any
32 additional activities that would be inconsistent with these plans. In addition, existing oil
33 spill contingency and emergency response plans for the proposed project site would be
34 revised to incorporate proposed facility and operational changes. Because existing
35 management plans are commonly revised to incorporate terminal operation changes,
36 conflicts with existing contingency and emergency response plans are not anticipated.

37 The following emergency plans apply to the Port area:

- 38 ■ LAHD's Emergency Operations and Organization Manual (September 2006);
39 ■ Tsunami Response Plan Annex of the Emergency Operations and Organization
40 Manual (January 2008);
41 ■ Hazardous Materials Annex of the Emergency Department Master Plan and
42 Procedures (July 2008);

- 1 ▪ LAHD’s Emergency Procedures Plan (January 2011); and
- 2 ▪ LAHD’s evacuation plans.

3 The LAHD Emergency Operations and Organization Manual, the Tsunami Response
4 Plan Annex, and the Hazardous Materials Annex provide general emergency response
5 guidance to all City departments, including LAHD. In the event of an emergency, LAHD
6 is responsible for following this guidance. Furthermore, LAPD, LAFD, and the Port
7 Police would be able to provide adequate emergency response services during operation
8 of the proposed Project (see Section 3.13, Public Services, for more information
9 regarding police and fire response capabilities).

10 The proposed project site would be secured, with access allowed only to authorized
11 personnel. Proposed project operations would also be subject to emergency response and
12 evacuation systems implemented by LAHD and LAFD, which would review all plans to
13 ensure that adequate access in the proposed project vicinity is maintained. Therefore, the
14 proposed Project would not substantially interfere with the existing LAHD Emergency
15 Operations and Organization Manual, Tsunami Response Plan, or Hazardous Materials
16 Annex. YTI Terminal personnel, including dock laborers and equipment operators,
17 would be trained in emergency response and evacuation procedures. All proposed
18 project contractors would be required to adhere to plan requirements.

19 **CEQA Impact Determination**

20 ***Construction***

21 Project contractors would be required to adhere to all LAFD emergency response and
22 evacuation regulations, ensuring compliance with existing emergency response plans.
23 Therefore, construction activities would not substantially interfere with an existing
24 emergency response or evacuation plan or increase the risk of injury or death. Impacts
25 would be less than significant under CEQA.

26 ***Operation***

27 The proposed Project would continue to operate as a container terminal, and operations
28 would be subject to emergency response and evacuation systems implemented by LAHD
29 and LAFD. Thus, proposed project operations would not interfere with any existing
30 emergency response or emergency evacuation plans or increase the risk of injury or
31 death, and impacts would be less than significant under CEQA.

32 ***Mitigation Measures***

33 No mitigation is required.

34 ***Residual Impacts***

35 Impacts would be less than significant.

36 **NEPA Impact Determination**

37 ***Construction***

38 Project contractors would be required to adhere to all LAFD emergency response and
39 evacuation regulations, ensuring compliance with existing emergency response plans.
40 Therefore, construction activities would not substantially interfere with an existing

1 emergency response or evacuation plan or increase the risk of injury or death and impacts
2 would be less than significant under NEPA.

3 **Operation**

4 The proposed Project would continue to operate as a container terminal, and operations
5 would be subject to emergency response and evacuation systems implemented by LAFD.
6 Thus, proposed project operations would not interfere with any existing emergency
7 response or emergency evacuation plans or increase the risk of injury or death, and
8 impacts would be less than significant under NEPA.

9 **Mitigation Measures**

10 No mitigation is required.

11 **Residual Impacts**

12 Impacts would be less than significant.

13 **Impact RISK-4: The proposed Project would comply with applicable** 14 **regulations and policies guiding development within the Port.**

15 **Construction**

16 As described in Section 3.9.3.1, List of Regulations, the proposed Project would be
17 subject to numerous regulations for development and operation of the proposed facilities.
18 For example, construction would be completed in accordance with RCRA, CERCLA,
19 CCR Title 22 and Title 26, and the California Hazardous Waste Control Law, which
20 would govern proper containment, spill control, and disposal of hazardous waste
21 generated during construction activities. Implementation of increased inventory
22 accountability, spill prevention controls, and waste disposal controls associated with these
23 regulations would limit both the frequency and severity of potential releases of hazardous
24 materials.

25 Potential releases of hazardous substances during construction would be addressed
26 through the federal Emergency Planning and Right-to-Know Act, which is administered
27 in California by the SERC, and the Hazardous Material Release Response Plans and
28 Inventory Law. In addition, construction would be completed in accordance with the Los
29 Angeles Municipal Fire Code (LAFD), which regulates the construction of buildings and
30 other structures used to store flammable hazardous materials, and the LAMC (Public
31 Works and Property), which regulates the discharge of materials into the sanitary sewer
32 and storm drain. The latter requires the construction of spill-containment structures to
33 prevent the entry of forbidden materials, such as hazardous materials, into sanitary sewers
34 and storm drains. LAHD maintains compliance with these federal, state, and local laws
35 through a variety of methods, including internal compliance reviews, preparation of
36 regulatory plans, and agency oversight. These regulations would be adhered to during
37 construction of the proposed Project. Implementation of increased spill prevention
38 controls, spill release notification requirements, and waste disposal controls associated
39 with these regulations would limit both the frequency and severity of potential releases of
40 hazardous materials.

41 Construction activities would be conducted using BMPs in accordance with City
42 guidelines, as detailed in the *Development Best Management Practices Handbook—Part*

1 *A, Construction Activities* (City of Los Angeles 2004). Some of the applicable BMPs
2 include, but are not limited to: training of personnel; proper vehicle and equipment
3 fueling and maintenance to prevent fluids (such as oil, hydraulic fluid, lubricants, or
4 brake fluids) from leaking; proper material delivery, storage, and use to prevent discharge
5 of pollutants; Spill Prevention, Control, and Countermeasure plans to manage spills;
6 management of solid and hazardous wastes; and management of contaminated soil.
7 Proposed project plans and specifications would be reviewed by LAFD for conformance
8 to the LAFC, as a standard practice. Implementation of increased spill prevention
9 controls associated with these BMPs would limit both the frequency and severity of
10 potential releases of hazardous materials.

11 **Operation**

12 The proposed Project would be subject to numerous regulations for operation of the
13 improved terminal. LAHD has implemented various plans and programs to ensure
14 compliance with these regulations, which must be adhered to during terminal operation.
15 For example, as discussed in Section 3.9.3.1, List of Regulations, USCG maintains an
16 HMSD, under the jurisdiction of the federal Department of Homeland Security
17 (33 CFR 126), which develops standards and industry guidance to promote the safety of
18 life and protection of property and the environment during marine transportation of
19 hazardous materials. Among other requirements, the proposed Project would conform to
20 the USCG requirement to provide a segregated cargo area for containerized hazardous
21 materials. Terminal cargo operations involving hazardous materials are also governed by
22 LAFD in accordance with regulations of state and federal departments of transportation
23 (49 CFR 176). The transport of hazardous materials in containers on the street and
24 highway system is regulated by Caltrans procedures and the Standardized Emergency
25 Management System prescribed under Section 8607 of the California Government Code.
26 These safety regulations strictly govern the storage of hazardous materials in containers
27 (i.e., types of materials and size of packages containing hazardous materials).

28 LAHD maintains compliance with these state and federal laws through a variety of
29 methods, including internal compliance reviews, preparation of regulatory plans, and
30 agency oversight. Most notably, the Port RMP, as presented in the Port Master Plan
31 update, includes a framework within which the LAHD can implement the RMP for
32 hazardous liquid bulk cargo and vulnerable resources to minimize or eliminate the
33 overlap of hazardous footprints on vulnerable resources (POLA 2013). This would be
34 achieved mainly through physical separation as well as through facility design features,
35 fire protection, and other risk management methods. There are two primary categories of
36 vulnerable resources: people and facilities. People are further divided into subgroups.
37 The first subgroup comprises residents, recreational users, and visitors. Within the Port
38 setting, residents and recreational users are considered vulnerable resources. The second
39 subgroup comprises workers in high density (i.e., generally more than 10 people per acre,
40 per employer). There are certain facilities in the Port that are important to the local,
41 regional, or national economies. These facilities, if damaged or destroyed, could have a
42 critical impact on the ability of the Port to accommodate cargo movements. The Badger
43 Avenue Bridge and the Vincent Thomas Bridge are identified as being vulnerable
44 resources under the RMP. LAHD may identify and approve future critical impact
45 facilities on an individual basis (POLA 2013).

46 Container terminals have never been considered vulnerable resources in risk analyses
47 completed by LAHD and LAFD (POLA 2008). Because container terminals are not

1 considered vulnerable resources, and because the proposed terminal improvements would
2 not expose the residential or recreational users to increased risk, the proposed Project
3 would not conflict with the RMP.

4 Proposed project plans and specifications would be reviewed by LAFD for conformance
5 to the LAFC, as a standard practice.

6 Operation of the proposed Project would be required to comply with all existing
7 hazardous waste laws and regulations, including the federal RCRA and CERCLA, and
8 CCR Title 22 and Title 26. The proposed Project would comply with these laws and
9 regulations, which would ensure that potential hazardous materials handling would occur
10 in an acceptable manner.

11 **CEQA Impact Determination**

12 ***Construction***

13 Proposed project construction would be completed using standard BMPs and in
14 accordance with LAHD plans and programs, LAFD regulations, LAMC requirements,
15 and applicable hazardous waste laws and regulations. Therefore, impacts relating to
16 compliance with applicable regulations and policies guiding development in the Port
17 would be less than significant under CEQA.

18 ***Operation***

19 Operations at the proposed project site would not conflict with RMP guidelines.
20 Proposed project plans would be reviewed by LAFD for conformance to the LAFC, and
21 operation of the proposed Project would be required to comply with all existing
22 applicable hazardous waste laws and regulations. Therefore, proposed project operations
23 would comply with applicable regulations and policies guiding development in the Port.
24 Impacts would be less than significant under CEQA.

25 ***Mitigation Measures***

26 No mitigation is required.

27 ***Residual Impacts***

28 Impacts would be less than significant.

29 **NEPA Impact Determination**

30 ***Construction***

31 Proposed project construction would be completed using standard BMPs and in
32 accordance with LAHD plans and programs, LAFD regulations, LAMC requirements,
33 and applicable hazardous waste laws and regulations. Therefore, impacts relating to
34 compliance with applicable regulations and policies guiding development in the Port
35 would be less than significant under NEPA.

36 ***Operation***

37 Operations at the proposed project site would not conflict with RMP guidelines.
38 Proposed project plans would be reviewed by LAFD for conformance to the LAFC, and
39 operation of the proposed Project would be required to comply with all existing

1 applicable hazardous waste laws and regulations. Therefore, proposed project operations
2 would comply with applicable regulations and policies guiding development in the Port.
3 Impacts would be less than significant under NEPA.

4 ***Mitigation Measures***

5 No mitigation is required.

6 ***Residual Impacts***

7 Impacts would be less than significant.

8 **Impact RISK-5: Tsunami-induced flooding and seismic events could**
9 **result in fuel releases from construction equipment or hazardous**
10 **substances releases from containers under the proposed Project,**
11 **which in turn would result in risks to persons and/or the**
12 **environment.**

13 ***Construction***

14 As discussed in Section 3.5, Geology, there is the potential for a major earthquake or a
15 large tsunami to affect the Port. Either event occurring during construction could lead to
16 a fuel spill from construction equipment, as well as from containers of petroleum
17 products and hazardous substances used during the construction period. However, the
18 volume of spilled fuel is expected to be relatively low. While there would be fuel-
19 containing equipment present during construction, most would be equipped with
20 watertight tanks, thereby making it most likely that water would infiltrate into the tank
21 and fuel combustion chambers, and very little fuel would spill. Thus, the volume spilled
22 in the event of a tsunami or other seismic risk is expected to be less than 10,000 gallons,
23 which is considered “slight” as a consequence classification.

24 A tsunami event could result in damage to property or injury related to in-water
25 construction. The Port is subject to diurnal tides, meaning two high tides and two low
26 tides during a 24-hour day. The average of the lowest water level during low tide periods
27 each day is typically set as a benchmark of 0 feet and is defined as the Mean Lower-Low
28 Water level (or MLLW). For purposes of this discussion, all proposed project structures
29 and land surfaces are expressed as height above (or below) MLLW. The mean sea level
30 (MSL) in the Port is +2.8 feet above MLLW (NOAA 2011c). This height reflects the
31 arithmetic mean of hourly heights observed over the National Tidal Datum Epoch
32 (19 years) and, therefore, reflects the mean of both high and low tides in the Port. The
33 recently developed Port Complex model described in Section 3.5.2 predicts tsunami wave
34 heights with respect to MSL, rather than MLLW, and, therefore, can be considered a
35 reasonable average condition under which a tsunami might occur. The Port MSL of
36 +2.8 feet must be considered in comparing projected tsunami run-up (i.e., amount of
37 wharf overtopping and flooding) to proposed wharf height and topographic elevations,
38 which are measured with respect to MLLW.

39 A reasonably foreseeable scenario for generation of a tsunami or seiche in the Port
40 Complex includes the recently developed Port Complex model, which predicts a
41 maximum tsunami wave height, or reasonable worst-case scenario, of approximately 5.2
42 to 6.6 feet above MSL for the earthquake scenario and approximately 7.2 to 23.0 feet
43 above MSL for the landslide scenario at certain locations within the Port. The highest

1 anticipated water levels from the earthquake scenarios are predicted to occur in the East
2 Channel area of the Port. The highest anticipated water levels from the landslide
3 scenarios would occur in the Outer Harbor area and the western side of Pier 400. The
4 report determined that, for the worst-case landslide scenario, water levels could exceed
5 the adjacent deck levels in some localized areas (Pier 400) and some limited overtopping
6 of the wharves could occur; however, no overtopping is expected at the Port for any of
7 the other scenarios analyzed. Additionally, none of the scenarios modeled, including the
8 two with the most significant sea level rise (Palos Verdes Landslide scenario and Catalina
9 Fault: 7 Segments scenario), denoted a sea water level rise impact in the YTI Terminal
10 area. The Port Complex model also identified the lowest deck elevations throughout the
11 Port using various sources of data. According to the study, the lowest deck elevations
12 near the proposed project site are adjacent to the East Basin Channel at approximately
13 11.2 feet above MSL (Moffatt and Nichol 2007). Based on the lowest deck elevation
14 (near the YTI Terminal) presented above and the data provided in the Port Complex
15 study, tsunami-induced flooding would not occur at the proposed project site under any
16 of the earthquake and landslide scenarios. Therefore, localized tsunami-induced flooding
17 is not expected to occur within the proposed project site.

18 While the analysis above considers the greatest reasonably foreseeable seismic risk based
19 on a maximum seismic event, with respect to MSL, a theoretical maximum worst-case
20 wave action from a tsunami would result if the single highest tide predicted over the next
21 40 years at the Port Complex coincided with the seismic event, which could result in
22 damage to property or injury related to in-water construction. The single highest tide
23 predicted over the next 40 years is 7.3 feet above MLLW. This condition is expected to
24 occur less than one percent of the time over this 40-year period. Given the limited
25 duration of in-water construction activities and very low likelihood of a worst-case
26 tsunami occurring during construction activities, this scenario is unlikely to occur.

27 The most likely worst-case tsunami scenario was based partially on a magnitude
28 7.6 earthquake on the offshore Santa Catalina fault. The recurrence interval for a
29 magnitude 7.5 earthquake along an offshore fault in the Southern California Continental
30 Borderland is about 10,000 years. The recurrence interval of a magnitude 7.0 earthquake
31 is about 5,000 years, and the recurrence interval of a magnitude 6.0 earthquake is about
32 500 years. However, there is no certainty that any of these earthquake events would
33 result in a tsunami, because only about 10% of earthquakes worldwide result in a
34 tsunami. In addition, available evidence indicates that tsunamigenic landslides are
35 extremely infrequent and occur less often than large earthquakes. This suggests
36 recurrence intervals for such landslide events would be longer than the 10,000-year
37 recurrence interval estimated for a magnitude 7.5 earthquake (Moffatt and Nichol 2007).
38 Thus, the probability of the worst-case combination of a large tsunami and extremely
39 high tides would be less than once in a 100,000-year period.

40 The coincidence of two unlikely events—the occurrence of the single highest tide
41 predicted over the next 40 years and the theoretical maximum wave action from a
42 tsunami event occurring during construction—is extremely unlikely, and such an
43 assumption represents an extremely conservative, worst-case scenario, which is not
44 required under CEQA or NEPA.

45 **Operation**

46 As discussed in Section 3.5, Geology, and above, there is the potential for a large tsunami
47 to affect the Port. Based on the lowest deck elevation (near the YTI Terminal) presented

1 above and the data provided in the Port Complex study, tsunami-induced flooding would
2 not occur at the proposed project site under any of the earthquake and landslide scenarios.
3 Therefore, localized tsunami-induced flooding is not expected to occur within the
4 proposed project site. However, a large tsunami could potentially lead to a fuel spill if a
5 moored vessel is present, as each ship contains large quantities of fuel oil (up to 5,000
6 barrels). While in transit, the tankers are exposed to insignificant and, in most cases,
7 imperceptible, hazards. However, while docked, a ship could be subject to significant
8 movement in the event that tsunami strikes the Port. Most likely, the vessel would stay
9 secured to the berth and ride out the tsunami; however, it is possible that the motion
10 during a tsunami would cause the mooring lines of the vessel to break free and the vessel
11 to be set adrift. Under the first scenario, the transmitted energy of the tsunami wave
12 would go through the vessel moored at berth and into the wharf. Forces transmitted
13 through the vessel would be transferred to the fendering system of the wharf and then to
14 the wharf structure. Under the second scenario, a vessel set adrift in the Port area could
15 experience serious consequences from a potential collision, including a potential hull
16 breach and possible fuel spill.

17 Containers of hazardous substances on ships or on berths could similarly be damaged as a
18 result of a large tsunami. Such damage could result in releases of both hazardous and
19 nonhazardous cargo to the environment, adversely affecting persons and/or the marine
20 waters. However, containers carrying hazardous cargo would not necessarily release
21 their contents in the event of a large tsunami. USDOT regulations (49 CFR 172–180)
22 covering hazardous material packaging and transport would minimize potential release
23 volumes, since packages must meet minimum integrity specifications and size
24 limitations.

25 The owners or operators of tanker vessels are required to have on board approved Tank
26 Vessel Response Plans and qualified individuals in the U.S. with full authority to
27 implement removal actions in the event of an oil spill incident, and to contract with the
28 spill response organizations to carry out cleanup activities in case of a spill. The existing
29 oil spill response capabilities in the Port would be sufficient to isolate spills with
30 containment booms and recover the maximum possible spill from an oil tanker.

31 Various studies have shown that double-hull tank vessels have a lower probability of
32 releases when tanker vessels are involved in accidents. Because of these studies, USCG
33 issued regulations addressing double-hull requirements for tanker vessels. These
34 regulations establish a timeline for eliminating single-hull vessels from operating in the
35 navigable waters or the Exclusive Economic Zone of the U.S. after January 1, 2010,
36 allowing only double-bottom or double-sided vessels by January 1, 2015. Only vessels
37 equipped with a double hull, or with an approved double containment system, will be
38 allowed to operate after those times. It is unlikely that single-hull vessels would use the
39 proposed project terminal facilities, given the current proposed project schedule and the
40 planned phase-out of these vessels.

41 Impacts due to seismically induced tsunamis and seiches are typical for the entire
42 California coastline, and would not be increased by construction of the proposed Project.
43 Because a major tsunami is not expected during the life of the proposed Project, but could
44 occur (see Section 3.5, Geology, and above for additional information on the probability
45 of a major tsunami), the probability of a major tsunami occurring is classified as
46 “improbable.” The potential consequence of such an event is classified as “moderate,”
47 resulting in a Risk Code of 4, which is “acceptable.” The volume of spilled fuel is also

1 expected to be relatively low, because all fuel storage containers at the proposed project
2 site would be quite small in comparison to the significance criteria volumes. Given that
3 single-hulled vessels would not be used, there would be a minimal chance of a
4 substantive fuel spill. While there would be fuel-containing equipment present during
5 construction, most would be equipped with watertight tanks, thereby making it most
6 likely that water would infiltrate into the tank and fuel combustion chambers, and very
7 little fuel would spill. Further, any spills that occur as a result of a large tsunami would
8 be subject to compliance with applicable federal, state, and local laws and regulations
9 governing emergency response to hazardous material spills.

10 **CEQA Impact Determination**

11 ***Construction***

12 The volume spilled in the event of a tsunami would likely be less than 10,000 gallons,
13 which is considered “slight.” A major tsunami is not expected during construction of the
14 proposed Project, but one could occur; therefore, the probability of a major tsunami
15 occurring during construction of the proposed Project is classified as “improbable,”
16 resulting in a Risk Code of 4, which is “acceptable.” In light of such a low probability
17 and acceptable risk of a large tsunami, impacts under CEQA would be less than
18 significant as they pertain to hazardous materials spills.

19 ***Operation***

20 A major tsunami is not expected during the life of the proposed Project, but one could
21 occur; therefore, the probability of a major tsunami occurring is classified as
22 “improbable.” The potential consequence of such an event would be classified as
23 “moderate,” resulting in a Risk Code of 4, which is “acceptable.” In light of the low
24 probability and acceptable risk of a large tsunami, impacts under CEQA would be less
25 than significant as they pertain to hazardous materials spills.

26 ***Mitigation Measures***

27 No mitigation is required.

28 ***Residual Impacts***

29 Impacts would be less than significant.

30 **NEPA Impact Determination**

31 ***Construction***

32 The volume spilled in the event of a tsunami would likely be less than 10,000 gallons,
33 which is considered “slight.” A major tsunami is not expected during construction of the
34 proposed Project, but one could occur; therefore, the probability of a major tsunami
35 occurring during construction of the proposed Project is classified as “improbable,”
36 resulting in a Risk Code of 4, which is “acceptable.” In light of such a low probability
37 and acceptable risk of a large tsunami, impacts would be less than significant as they
38 pertain to hazardous materials spills under NEPA.

39 ***Operation***

40 A major tsunami is not expected during the life of the proposed Project, but one could
41 occur; therefore, the probability of a major tsunami occurring is classified as

1 “improbable.” The potential consequence of such an event would be classified as
2 “moderate,” resulting in a Risk Code of 4, which is “acceptable.” In light of the low
3 probability and acceptable risk of a large tsunami, impacts under NEPA would be less
4 than significant as they pertain to hazardous materials spills.

5 ***Mitigation Measures***

6 No mitigation is required.

7 ***Residual Impacts***

8 Impacts would be less than significant.

9 **Impact RISK-6: Proposed Project–related terminal modifications**
10 **would not result in a measurable increase in the probability of a**
11 **terrorist attack and would not result in adverse consequences to the**
12 **proposed project site and nearby areas.**

13 **Risk of Terrorist Actions**

14 ***Construction***

15 The proposed project site is an existing container terminal and would not constitute a new
16 potential target for terrorists. The probability of a terrorist attack on the proposed project
17 facilities is not likely to appreciably change during construction compared to existing
18 conditions. It is possible that the increase in construction vessel traffic in the vicinity of
19 the YTI Terminal could lead to a greater opportunity of a successful terrorist attack by
20 providing increased chances for unauthorized terminal access and smuggling of harmful
21 devices into the terminal; however, existing Port security measures would counter this
22 potential increase in unauthorized access to the terminal. Berths 212–213 and Berths
23 214–216 would remain operational during Phase I, and Berths 212–213 and the newly
24 improved Berths 217–220 would be operational during Phase II of construction;
25 therefore, the risks associated with terrorism discussed in Section 3.9.2.3 would apply to
26 the terminal during this period. Such risks are addressed in the discussion of operational
27 impacts below. Existing Port and YTI Terminal security measures would help minimize
28 the risk of a successful terrorist attack and counter any potential increase in unauthorized
29 access to the terminal. The Port has a layered approach to security that includes the
30 security program of LAHD and the existing YTI Terminal. The vulnerability of the Port
31 and of individual cargo terminals, including the YTI Terminal, can be reduced by
32 implementing security measures, and the potential consequences of a terrorist action
33 could be affected by certain measures, such as emergency response preparations.

34 Compliance with maritime security regulations, including the MTSA and ISPS Code,
35 would minimize any potential increase in the risk of terrorist attacks during construction
36 and operation of the proposed Project. The MTSA regulations specify for cargo
37 terminals minimum security standards for physical security, access control, cargo
38 handling security, and interaction with berthed vessels, and they require that terminal
39 operators submit a Facility Security Plan to the USCG Captain of the Port for review and
40 approval prior to conducting cargo operations. The ISPS Code regulations require both
41 ships and ports to conduct vulnerability assessments and to develop security plans with
42 the purpose of preventing and suppressing terrorism against ships, improving security
43 aboard ships and ashore, and reducing risk to passengers, crew, and Port personnel on
44 board ships and in port areas, for vessels and cargo.

1 The YTI Terminal security is conducted in accordance with an existing Facility Security
2 Plan approved by the Captain of the Port for Sector Los Angeles-Long Beach in 2008,
3 and YTI uses mandatory MARSEC Access Control Measures. MARSEC levels are set to
4 reflect the prevailing threat environment to the marine elements of the national
5 transportation system and are designed for easy communication with the USCG and
6 maritime industry partners on any pre-planned scalable responses for credible threats.
7 Further, all cargo vessels 300 gross tons or larger that are flagged by International
8 Maritime Organization signatory nations adhere to ISPS code requirements as discussed
9 above and detailed in Section 3.9.2.4. LAHD is currently involved in initial
10 implementation of the TWIC program, which includes issuance of a tamper-resistant
11 biometric credential to maritime workers to minimize the potential for unauthorized
12 handling of containers that contain hazardous materials and provide additional shoreside
13 security at the terminal. The U.S. CBP enforces screening and scanning checks to ensure
14 security of cargo being shipped into the U.S. Further, LAHD continues to improve Port
15 security measures. For instance, in its latest five-year Strategic Plan for 2012–2017
16 (POLA 2012), LAHD describes two initiatives related to strengthening security
17 measures, including using Web media to enhance passage of critical information between
18 LAHD and local stakeholders, and delivering hands-on training in security and
19 emergency response.

20 Implementation and enforcement of the above security measures would serve to counter
21 any potential increase in risks of a successful terrorist attack at the YTI Terminal.

22 **Operation**

23 The probability of a terrorist attack on the proposed project facilities is not likely to
24 appreciably change during operation compared to existing conditions. The proposed
25 project site is an existing container terminal and would not constitute a new potential
26 target for terrorists. Operation of the proposed Project would support higher container
27 throughput and make the terminal more efficient, but the terminal improvements are not
28 expected to make the existing YTI Terminal more attractive to terrorists. It is possible
29 that the increase in vessel traffic at the terminal as a result of the proposed Project could
30 lead to a greater opportunity of a successful terrorist attack by providing increased
31 chances for unauthorized terminal access and smuggling of harmful devices into the
32 terminal; however, existing Port security measures as described above under construction
33 impacts would counter the potential for increase in unauthorized access to the terminal.
34 Further, the likelihood of such an event would not be affected by proposed Project-related
35 throughput increases, but would depend on the terrorist's desired outcome and the ability
36 of safeguards and security measures, unaffected by the proposed Project, to thwart the
37 attack. Container ships are not attractive targets in terms of loss of life or producing large
38 fires and explosions. Also, containers represent only one of many potential methods to
39 smuggle harmful weapons (e.g., weapons of mass destruction or conventional explosive
40 devices) into the Port. With current security initiatives, cargo containers may actually be
41 less desirable than other established smuggling routes (e.g., land-based ports of entry,
42 cross-border tunnels, illegal vessel transportation).

43 **Consequences of Terrorist Attack**

44 The potential consequences of a terrorist action on a container terminal would be
45 catastrophic, specifically in terms of environmental and economic impacts. It could
46 block key road access points and waterways and result in economic disruption. These

1 impacts would likely be limited to the area surrounding the point of attack and would be
2 responded to by emergency response providers.

3 A terrorist action involving a container vessel while at berth may result in a fuel and/or
4 commodity spill and associated environmental damage to the marine environment, with
5 associated degradation of water quality and damage to marine biological resources.
6 Within the Port, a terrorist action could block key waterways and result in economic
7 disruption. Container ships typically carry up to 5,000 barrels of fuel oil, but would not
8 be full when arriving at the Port. Impacts would be limited to the area surrounding the
9 point of attack and would be contained by the relevant oil spill response contractor. A
10 potential fire associated with a terrorist attack could result in short-term impacts to local
11 air quality. Potential impacts to the environment are addressed in specific resource
12 sections, including Section 3.2, Air Quality and Meteorology; Section 3.3, Biological
13 Resources; and Section 3.15, Water Quality, Sediments, and Oceanography.

14 The consequences associated with the smuggling of weapons of mass destruction would
15 be substantial in terms of impacts to the environment and public health and safety.
16 However, the consequences of a weapon of mass destruction attack would not be affected
17 by the proposed Project. Furthermore, the likelihood of such an event would not be
18 impacted by proposed Project-related infrastructure or throughput increases, but would
19 depend on the terrorist's desired outcome and the ability of safeguards, unaffected by the
20 proposed Project, to thwart it. Cargo containers represent only one of many potential
21 methods to smuggle weapons of mass destruction and, with current security initiatives,
22 (see Section 3.9.2.4) may be less plausible than other established smuggling routes (e.g.,
23 land-based ports of entry, cross-border tunnels, and illegal vessel transportation).

24 Any increase in the volume of container vessels visiting the proposed project site would
25 not change the probability or consequences of a terrorist attack on the YTI Terminal
26 because the terminal is already considered a potential economic target, and increased
27 throughput is not expected to affect any motivation for a potential attack or the potential
28 mode to smuggle a weapon into the U.S..

29 **CEQA Impact Determination**

30 ***Construction***

31 The potential for unauthorized access to the terminal site during construction by land,
32 water, and/or air is limited. Existing Port and terminal security measures would counter
33 any potential increase in unauthorized access to the terminal site through the use of
34 vehicles or vessels. The potential for a terrorist attack that would result in catastrophic
35 consequences (greater than 100 injuries or 10 fatalities) to areas near the proposed project
36 site during the construction period is considered extraordinarily improbable given the
37 limited construction duration and the limited access to the construction areas. This
38 combination would result in a Risk Code of 4, which is "acceptable," and impacts would
39 be less than significant under CEQA.

40 ***Operation***

41 The proposed Project would not change the vulnerability of the proposed project area or
42 the seriousness of the consequences. The environmental consequences of a terrorist
43 action, including threats to human health arising from the action and from the release,
44 explosion, or spill of hazardous materials would not substantially change. Security
45 initiatives have improved both terminal and cargo security, and have resulted in enhanced

1 cargo screening. Therefore, potential impacts under CEQA associated with a potential
2 terrorist attack on the YTI Terminal are considered less than significant.

3 ***Mitigation Measures***

4 No mitigation is required.

5 ***Residual Impacts***

6 Impacts would be less than significant.

7 **NEPA Impact Determination**

8 ***Construction***

9 The potential for unauthorized access to the terminal site during construction by land,
10 water, and/or air is limited. Existing Port and terminal security measures would counter
11 any potential increase in unauthorized access to the terminal site through the use of
12 vehicles or vessels. The potential for a terrorist attack that would result in catastrophic
13 consequences (greater than 100 injuries or 10 fatalities) to areas near the proposed project
14 site during the construction period is considered extraordinarily improbable given the
15 limited construction duration and the limited access to the construction areas. This
16 combination would result in a Risk Code of 4, which is “acceptable,” and impacts would
17 be less than significant under NEPA.

18 ***Operation***

19 The proposed Project would not change the vulnerability of the proposed project area or
20 the seriousness of the consequences. The environmental consequences of a terrorist
21 action, including threats to human health arising from the action and from the release,
22 explosion, or spill of hazardous materials would not substantially change. Security
23 initiatives have improved both terminal and cargo security, and have resulted in enhanced
24 cargo screening. Therefore, potential impacts under NEPA associated with a potential
25 terrorist attack on the YTI Terminal are considered less than significant.

26 ***Mitigation Measures***

27 No mitigation is required.

28 ***Residual Impacts***

29 Impacts would be less than significant.

30 **Alternative 1 – No Project**

31 Under Alternative 1, none of the proposed construction activities would occur in water or
32 in water-side or backland areas. The Port would not undergo any terminal improvements.
33 No new cranes would be added, and no dredging would occur. The No Project
34 Alternative would not include the 100-foot gauge crane rail extension, expansion of the
35 TICTF on-dock rail yard, or backland repairs.

36 Under the No Project Alternative, the existing YTI Terminal would continue to operate as
37 an approximately 185-acre container terminal. Based on the Port’s throughput
38 projections, the YTI Terminal is expected to operate at its capacity of approximately
39 1,692,000 TEUs with 206 ship calls by 2026.

1 The No Project Alternative would not preclude future improvements to the proposed
2 project site. However, any future changes in use or new improvements with the potential
3 to significantly impact the environment would be analyzed in a separate environmental
4 document.

5 **Impact RISK-1: Alternative 1 would not increase the probable**
6 **frequency and severity of consequences to people or property as a**
7 **result of accidental release or explosion of a hazardous substance.**

8 **CEQA Impact Determination**

9 ***Construction***

10 Alternative 1 would not result in any construction-related activities. Because no
11 construction would occur, there would be no construction impacts under CEQA.

12 ***Operation***

13 Under Alternative 1, the YTI Terminal site would accommodate a maximum of
14 1,692,000 TEUs per year at maximum capacity (2026), compared to 996,109 TEUs under
15 existing conditions (January 2012 to December 2012). As with the proposed Project,
16 terminal operations would be subject to safety regulations that govern the storage and
17 handling of hazardous materials, which would limit the severity and frequency of
18 potential releases of hazardous materials resulting in increased exposure of people to
19 health hazards. In addition, USDOT Hazardous Materials Regulations (49 CFR 100–
20 185) regulate almost all aspects of terminal operations.

21 Implementation of increased hazardous materials inventory control and spill prevention
22 controls associated with state and federal regulations would limit both the frequency and
23 severity of potential releases of hazardous materials.

24 Quantities of hazardous materials used in terminal maintenance activities that exceed the
25 thresholds provided in Chapter 6.95 of the California Health and Safety Code would be
26 subject to an RRP and an HMI, which would limit both the frequency and severity of
27 potential releases of hazardous materials. Limited quantities of hazardous materials used
28 at the terminal that are below the thresholds of Chapter 6.95 would not likely result in a
29 substantial spillage into the environment.

30 Because projected terminal operations under Alternative 1 would accommodate an
31 approximate 1.7-fold increase in containerized cargo compared to the CEQA baseline,
32 the potential for an accidental release or explosion of hazardous materials would also be
33 expected to increase proportionally. Based on the estimated probability of a spill at a
34 container terminal of 1.14×10^{-6} per TEU, the frequency of project-related spills can be
35 estimated as shown in Table 3.9-9.

Table 3.9-9: Alternative 1: Existing and Projected Cargo Throughput Volumes at YTI Terminal Relative to CEQA Baseline

Operations	TEUs	Increase in TEUs (%)	Potential Spills (per year)
CEQA Baseline*	996,109	NA	1.1
Alternative 1 (2026)	1,692,000	69.9 %	1.9

Note:
 *CEQA Baseline: January 2012 to December 2012
 TEU = 20-foot equivalent unit

1
 2 Based on the projected increase in TEUs occupying the terminal site, the frequency of
 3 potential Alternative 1-related spills would increase to 1.9 spills per year from 1.1 spills
 4 under the baseline, which equates to an increase in the number of annual spills by 0.8
 5 under Alternative 1. This spill frequency would be classified as “periodic” (between
 6 once per year and once in ten years). Based on history, a slight possibility exists for
 7 injury and or property damage to occur during one of these frequent accidents; therefore
 8 the consequence of such accidents is classified as “slight,” resulting in a Risk Code of
 9 4, which is “acceptable.” Compliance with applicable federal, state, and local laws and
 10 regulations governing the transport of hazardous materials and emergency response to
 11 hazardous material spills, as described above, would minimize the potential for adverse
 12 public health impacts. Therefore, Alternative 1 operations would not substantially
 13 increase the probable frequency and severity of consequences to people or property as a
 14 result of an accidental release or explosion of a hazardous substance. Impacts under
 15 CEQA would be less than significant.

16 **Mitigation Measures**

17 No mitigation is required.

18 **Residual Impacts**

19 Impacts would be less than significant.

20 **NEPA Impact Determination**

21 The impacts of the No Project Alternative are not required to be analyzed under NEPA.
 22 NEPA requires the analysis of a No Federal Action Alternative (see Alternative 2).

23 **Mitigation Measures**

24 Mitigation measures are not applicable.

25 **Residual Impacts**

26 An impact determination is not applicable.

Impact RISK-2: Alternative 1 would not substantially increase the probable frequency and severity of consequences to people or property from exposure to health hazards.

CEQA Impact Determination

Construction

Alternative 1 would not result in any construction-related activities. Because no construction would occur, there would be no construction impacts under CEQA.

Operation

Under Alternative 1, YTI Terminal operations would accommodate a maximum of 1,692,000 TEUs per year at maximum capacity (in 2026) compared to 996,109 TEUs under CEQA baseline conditions (January 2012 to December 2012). This increased volume would increase the chance of a fire or explosion at the terminal. The handling and storing of increased quantities of hazardous materials would increase the probability of a local accident involving a release, spill, fire, or explosion, which would be proportional to the size of the terminal and TEUs at the site as addressed in Impact RISK-1.

Given the annual number of truck trips, the average distance of each trip, and the published accident, injury and fatality rates, probabilities were estimated as shown in Table 3.9-10.

Table 3.9-10: Alternative 1: Existing and Projected Truck Trips at YTI Terminal Relative to CEQA Baseline

Operations	Annual Truck Trips	Accident Rate (per year)	Injury Probability (per year)	Fatality Probability (per year)
CEQA Baseline	901,762	33.18	5.77	0.36
Alternative 1 (2026)	1,184,069	43.56	7.58	0.47
Increase over CEQA Baseline Conditions	282,307	10.39	1.81	0.11

Note: Numbers are rounded.

Because the occurrence of truck accidents associated with Alternative 1 could occur at a frequency greater than one per year, truck accidents are considered a “frequent” event. Because the possibility exists for increased injury and/or fatality to occur relative to CEQA baseline conditions is approximately 1.92 (1.81 injury probability + 0.11 fatality probability), as noted in Table 3.9-10, the consequence of such accidents is classified as “moderate,” because it is less than 10, resulting in a Risk Code of 3. An impact with a Risk Code of 3 is classified as “acceptable” with additional engineering or administrative controls to mitigate the adverse impacts, per the LACFD risk criticality (Table 3.9-4). The same administrative controls that would occur under the proposed Project would also occur under Alternative 1. Due to the implementation of these administrative controls, Alternative 1 operations would not substantially increase the probable frequency and

1 severity of consequences to people from exposure to health hazards, and potential
2 impacts under CEQA would be considered less than significant.

3 ***Mitigation Measure***

4 No mitigation is required.

5 ***Residual Impacts***

6 Impacts would be less than significant.

7 **NEPA Impact Determination**

8 The impacts of the No Project Alternative are not required to be analyzed under NEPA.
9 NEPA requires the analysis of a No Federal Action Alternative (see Alternative 2).

10 ***Mitigation Measures***

11 Mitigation measures are not applicable.

12 ***Residual Impacts***

13 An impact determination is not applicable.

14 **Impact RISK-3: Alternative 1 would not substantially interfere with**
15 **an existing emergency response or emergency evacuation plan,**
16 **thereby increasing risk of injury or death.**

17 **CEQA Impact Determination**

18 ***Construction***

19 Alternative 1 would not result in any construction-related activities. Because no
20 construction would occur, there would be no construction impacts under CEQA.

21 ***Operation***

22 Under Alternative 1, the YTI Terminal would continue to operate as a container terminal
23 handling cargo and freight. Therefore, Alternative 1 would not interfere with any
24 existing contingency plans, because the current activities are consistent with the
25 contingency plans, and Alternative 1 would not add any additional activities that would
26 be inconsistent with these plans.

27 All emergency response and evaluation plans and procedures as described under Impact
28 RISK-3 for the proposed Project would apply during Alternative 1 operations. YTI
29 Terminal personnel, including laborers and equipment operators, would be trained in
30 emergency response and evacuation procedures, and all contractors would be required to
31 adhere to plan requirements.

32 Because the terminal would continue to be operated as a container terminal, Alternative 1
33 operations would continue to be subject to emergency response and evacuation systems
34 implemented by the LAFD and LAHD. Operation of Alternative 1 would not interfere
35 with any existing emergency response or emergency evacuation plans or increase the risk
36 of injury or death. Therefore, impacts would be less than significant under CEQA.

1 **Mitigation Measures**

2 No mitigation is required.

3 **Residual Impacts**

4 Impacts would be less than significant.

5 **NEPA Impact Determination**

6 The impacts of the No Project Alternative are not required to be analyzed under NEPA.
7 NEPA requires the analysis of a No Federal Action Alternative (see Alternative 2).

8 **Mitigation Measures**

9 Mitigation measures are not applicable.

10 **Residual Impacts**

11 An impact determination is not applicable.

12 **Impact RISK-4: Alternative 1 would comply with applicable**
13 **regulations and policies guiding development within the Port.**

14 **CEQA Impact Determination**

15 **Construction**

16 Alternative 1 would not result in any construction-related activities. Because no
17 construction would occur, there would be no construction impacts under CEQA.

18 **Operation**

19 Operation of Alternative 1 would be subject to the same regulations and procedures as
20 described under Impact RISK-4 for the proposed Project. LAHD has implemented
21 various plans and programs to ensure compliance with these regulations, which must be
22 adhered to during Alternative 1 operations. The transport of hazardous materials in
23 containers on the street and highway system is regulated by Caltrans procedures and the
24 Standardized Emergency Management System, prescribed under Section 8607 of the
25 California Government Code. Any facilities identified as either a hazardous cargo
26 facility or a vulnerable resource would be required to conform to the RMP, which
27 includes packaging constraints and the provision of a separate storage area for hazardous
28 cargo.

29 LAHD maintains compliance with these state and federal laws through a variety of
30 methods, including internal compliance reviews, preparation of regulatory plans, and
31 agency oversight, most notably the Port RMP. Because container terminals are not
32 considered vulnerable resources, and because Alternative 1 would not expose the
33 residential or recreational users to increased risk, this alternative would not conflict with
34 the RMP.

35 Plans and specifications of existing facilities have been reviewed by LAFD for
36 conformance to the LAFC, as a standard practice. Operation of Alternative 1 would be
37 required to comply with all existing hazardous waste laws and regulations, including the
38 federal RCRA and CERCLA, and CCR Title 22 and Title 26. Operation of Alternative 1

1 would comply with these laws and regulations, which would ensure that potential
2 hazardous materials handling would occur in an acceptable manner. Operation of
3 Alternative 1 would not conflict with RMP guidelines or the LAFC and would be
4 required to comply with all applicable existing hazardous waste laws and regulations.
5 Therefore, under CEQA, Alternative 1 operations would comply with applicable
6 regulations and policies guiding development in the Port. Impacts under CEQA would be
7 less than significant.

8 ***Mitigation Measures***

9 No mitigation is required.

10 ***Residual Impacts***

11 Impacts would be less than significant.

12 **NEPA Impact Determination**

13 The impacts of the No Project Alternative are not required to be analyzed under NEPA.
14 NEPA requires the analysis of a No Federal Action Alternative (see Alternative 2).

15 ***Mitigation Measures***

16 Mitigation measures are not applicable.

17 ***Residual Impacts***

18 An impact determination is not applicable.

19 **Impact RISK-5: Tsunami-induced flooding and seismic events could**
20 **result in fuel releases from ships or hazardous substances releases**
21 **from containers under Alternative 1, which in turn could result in**
22 **risks to persons and/or the environment.**

23 **CEQA Impact Determination**

24 ***Construction***

25 Because no construction would occur, there would be no construction impacts as they
26 pertain to hazardous materials spills.

27 ***Operation***

28 As discussed in Section 3.5, Geology, and under RISK-5 for the proposed Project, there
29 is the potential for a large tsunami to impact the Port. Based on the lowest deck elevation
30 (near the YTI Terminal) presented above and the data provided in the Port Complex
31 study, tsunami-induced flooding would not occur at the proposed project site under any
32 of the earthquake and landslide scenarios. Therefore, localized tsunami-induced flooding
33 is not expected to occur within the proposed project site. However, a large tsunami could
34 potentially lead to a fuel spill if a moored vessel is present as each ship contains large
35 quantities of fuel oil (up to 5,000 barrels). While in transit, the tankers are exposed to
36 insignificant and, in most cases, imperceptible, hazards. However, a tsunami striking the
37 Port could cause significant ship movement to docked ships, including a hull breach, if
38 the ship is pushed against the wharf.

1 Because a major tsunami is not expected during the life of Alternative 1, but could occur
2 (see Section 3.5, Geology, and RISK-5 under the proposed Project for additional
3 information on the probability of a major tsunami and potential volume of spilled fuel),
4 the probability of a major tsunami occurring is classified as “improbable.” The
5 consequence of such an event is classified as “moderate,” resulting in a Risk Code of 4,
6 which is “acceptable.” The volume spilled in the event of a tsunami would likely be less
7 than 10,000 gallons, which is considered “slight.” In light of such low probability and
8 acceptable risk of a large tsunami or other seismic risk, impacts under CEQA would be
9 less than significant.

10 ***Mitigation Measures***

11 No mitigation is required.

12 ***Residual Impacts***

13 Impacts would be less than significant.

14 **NEPA Impact Determination**

15 The impacts of the No Project Alternative are not required to be analyzed under NEPA.
16 NEPA requires the analysis of a No Federal Action Alternative (see Alternative 2).

17 ***Mitigation Measures***

18 Mitigation measures are not applicable.

19 ***Residual Impacts***

20 An impact determination is not applicable.

21 **Impact RISK-6: Alternative 1–related terminal modifications would**
22 **not result in a measurable increase in the probability of a terrorist**
23 **attack and would not result in adverse consequences to the**
24 **proposed project site and nearby areas.**

25 **CEQA Impact Determination**

26 ***Construction***

27 Alternative 1 would not result in any construction-related activities. Because no
28 construction would occur, there would be no construction impacts under CEQA.

29 ***Operation***

30 An increase in the number of container vessels calling at the YTI Terminal under
31 Alternative 1 would not change the probability or consequences of a terrorist attack on
32 the terminal, because it is already considered a potential economic target, and increased
33 throughput is not expected to affect any motivation for a potential attack. The risks
34 associated with terrorism discussed under the proposed Project above would also apply to
35 the terminal during operations under Alternative 1. The security initiatives described in
36 Section 3.9.2.4 would serve to reduce the potential for a successful terrorist attack on the
37 YTI Terminal.

1 Compliance with maritime security regulations, including the MTSA and ISPS Code,
2 would minimize any potential increase in the risk of terrorist attacks during operation of
3 Alternative 1. Implementation and enforcement of security measures by LAHD, YTI,
4 and U.S. CBP would serve to counter the potential for increase in unauthorized access to
5 the terminal due to increased vessel traffic and help minimize any potential increase in
6 risk of a successful terrorist attack. Alternative 1 would not change the seriousness of the
7 consequences of a terrorist action on a container terminal, which could be catastrophic,
8 specifically in terms of environmental and economic impacts. However, these impacts
9 would likely be limited to the area surrounding the point of attack and would be
10 responded to by emergency response providers. Potential impacts to the environment are
11 addressed in specific resource sections, including Section 3.2, Air Quality and
12 Meteorology; Section 3.3, Biological Resources; and Section 3.15, Water Quality,
13 Sediments, and Oceanography. Security initiatives have improved both terminal and
14 cargo security, and have resulted in enhanced cargo screening. Therefore, potential
15 impacts under CEQA associated with a potential terrorist attack on the YTI Terminal are
16 considered less than significant.

17 ***Mitigation Measures***

18 No mitigation is required.

19 ***Residual Impacts***

20 Impacts would be less than significant.

21 **NEPA Impact Determination**

22 The impacts of the No Project Alternative are not required to be analyzed under NEPA.
23 NEPA requires the analysis of a No Federal Action Alternative (see Alternative 2).

24 ***Mitigation Measures***

25 Mitigation measures are not applicable.

26 ***Residual Impacts***

27 An impact determination is not applicable.

28 **Alternative 2 – No Federal Action**

29 Alternative 2 is a NEPA-required no action alternative for purposes of this Draft
30 EIS/EIR. This alternative includes the activities that would occur absent a USACE
31 permit and could include improvements that require a local permit. Absent a USACE
32 permit, no dredging, dredged material disposal, in-water pile installation, or crane
33 installation/extension would occur. Expansion of the TICTF and extension of the crane
34 rail also would not occur. The No Federal Action alternative includes only backlands
35 improvements consisting of slurry sealing; deep cold planing; asphalt concrete overlay;
36 restriping; and removal, relocation, or modification of any underground conduits and
37 pipes necessary to complete the repairs. These activities would not change the capacity
38 of the existing terminal.

39 The site would continue to operate as an approximately 185-acre container terminal
40 where cargo containers are loaded to/from vessels, temporarily stored on backlands, and
41 transferred to/from trucks or on-dock rail. Based on throughput projections, under the No

1 Federal Alternative, the YTI Terminal is expected to reach its operating capacity of
2 approximately 1,692,000 TEUs with 206 ship calls by 2026.

3 **Impact RISK-1: Alternative 2 would not increase the probable**
4 **frequency and severity of consequences to people or property as a**
5 **result of accidental release or explosion of a hazardous substance.**

6 **CEQA Impact Determination**

7 ***Construction***

8 Alternative 2 would result in only minor construction-related activities associated with
9 backlands improvements. Similar to construction activities described for the proposed
10 Project under RISK-1, these minor construction-related activities would be conducted
11 using BMPs in accordance with City guidelines, and in compliance with federal and state
12 regulations governing hazardous materials, the State General Permit for Storm Water
13 Discharges Associated with Construction Activity (Construction General Permit Order
14 2009-0009-DWQ), and the proposed Project-specific SWPPP that has been prepared in
15 accordance with California NPDES permit CAS000001 2013 (Hansen pers. comm.).

16 It is unlikely that construction activities would involve the use of substantial quantities of
17 hazardous materials, and the most likely spills or releases of hazardous materials during
18 construction would involve petroleum products, such as diesel fuel, gasoline, oils, and
19 lubricants from vehicles at the site. Because construction-related spills are not
20 uncommon, the probability of a spill occurring is classified as “frequent” (more than once
21 a year). However, such spills are typically short-term and localized. This is attributable
22 to the fact that the volume in any single source vehicle is generally less than 50 gallons,
23 and fuel trucks that might be present at the site would be limited to 10,000 gallons or less.
24 Thus, the potential consequence of such accidents is classified as “slight,” resulting in a
25 Risk Code of 4, which is “acceptable.” Any contaminated soil or groundwater
26 encountered during construction under Alternative 2 would be handled, transported,
27 remediated, or disposed of in accordance with all applicable federal, state, and local laws
28 and regulations and in accordance with the regulatory lead agency and LAHD mitigation
29 measures pertaining to site remediation (GW-1) and development of a contamination
30 contingency plan (GW-2) (see Section 3.8, Groundwater and Soils).

31 Proposed construction activities under Alternative 2 would not substantially increase the
32 probable frequency and severity of consequences to people or property as a result of an
33 accidental release or explosion of a hazardous substance. Impacts would be less than
34 significant under CEQA.

35 ***Operation***

36 As described for the proposed Project, terminal operations would be subject to safety
37 regulations that govern the storage and handling of hazardous materials, which would
38 limit the severity and frequency of potential releases of hazardous materials resulting in
39 increased exposure of people to health hazards. In addition, USDOT Hazardous
40 Materials Regulations (Title 49 CFR 100–185) regulate almost all aspects of terminal
41 operations. Implementation of increased hazardous materials inventory control and spill
42 prevention controls associated with these regulations would limit both the frequency and
43 severity of potential releases of hazardous materials. Quantities of hazardous materials
44 used in terminal maintenance activities that exceed the thresholds provided in Chapter

1 6.95 of the California Health and Safety Code would be subject to an RRP and an HMI,
2 which would limit both the frequency and severity of potential releases of hazardous
3 materials. Limited quantities of hazardous materials used at the terminal that are below
4 the thresholds of Chapter 6.95 would not likely result in a substantial spillage into the
5 environment.

6 As with Alternative 1, under Alternative 2 the YTI Terminal site would accommodate a
7 maximum of 1,692,000 TEUs per year at maximum capacity (2026), compared to
8 996,109 TEUs under CEQA baseline conditions (January 2012 to December 2012),
9 which would represent an approximate 1.7-fold increase in containerized cargo compared
10 to the CEQA baseline, and thus the potential for an accidental release or explosion of
11 hazardous materials would also be expected to increase proportionally. As determined
12 for Alternative 1 in Table 3.9-9, the frequency of potential Alternative 2-related spills
13 would also increase to 1.9 spills per year from 1.1 spills under the baseline, which
14 equates to an increase in the number of annual spills by 0.8 under Alternative 2. This spill
15 frequency would be classified as “periodic” (between one per year and once in ten years),
16 and the consequence of such accidents is classified as “slight,” resulting in a Risk Code
17 of 4, which is “acceptable.” Compliance with applicable federal, state, and local laws
18 and regulations governing the transport of hazardous materials and emergency response
19 to hazardous material spills, as described above, would minimize the potential for adverse
20 public health impacts. Therefore, under CEQA, Alternative 2 operations would not
21 substantially increase the probable frequency and severity of consequences to people or
22 property as a result of an accidental release or explosion of a hazardous substance.
23 Impacts under CEQA would be less than significant.

24 ***Mitigation Measures***

25 No mitigation is required.

26 ***Residual Impacts***

27 Impacts would be less than significant.

28 **NEPA Impact Determination**

29 Alternative 2 would include only backlands improvements consisting of slurry sealing;
30 deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or
31 modification of any underground conduits and pipes necessary to complete repairs. No
32 construction of in-water or over-water features would occur under Alternative 2. The No
33 Federal Action Alternative would involve the same construction activities as would occur
34 under the NEPA baseline. Therefore, there would be no incremental difference between
35 Alternative 2 and the NEPA baseline. As a consequence, Alternative 2 would result in no
36 impact under NEPA.

37 ***Mitigation Measures***

38 No mitigation is required.

39 ***Residual Impacts***

40 No impacts would occur.

1 **Impact RISK-2: Alternative 2 would not substantially increase the**
2 **probable frequency and severity of consequences to people or**
3 **property from exposure to health hazards.**

4 **CEQA Impact Determination**

5 **Construction**

6 Alternative 2 would result in only minor construction-related activities associated with
7 backlands improvements. Similar to construction activities described for the proposed
8 Project under RISK-1, these minor construction-related activities would be conducted
9 using BMPs in accordance with City guidelines, as detailed in the *Development Best*
10 *Management Practices Handbook—Part A, Construction Activities* (City of Los Angeles
11 2004), and the Los Angeles Municipal Code (Chapter 5, Section 57, Divisions 4 and 5;
12 Chapter 6, Article 4). Quantities of hazardous materials that exceed the thresholds
13 provided in Chapter 6.95 of the California Health and Safety Code would be subject to an
14 RRP and an HMI, which would minimize potential health hazards and/or contamination
15 of soil or water during construction activities. Impacts from contamination of soil or
16 water during construction activities would apply to not only construction personnel, but
17 also to people and property occupying operational portions of the proposed Alternative 2
18 area because Berths 212–213 and Berths 214–216 would remain in operation during the
19 nominal construction activities.

20 Hazardous materials shipped, transported, handled, or otherwise stored would be in
21 compliance with the RMP, USCG regulations, fire department requirements, and state
22 and federal departments of transportation regulations (49 Part 176). Implementation of
23 the abovementioned preventative measures would minimize the potential for spills to
24 affect members of the public, including on-site employees, and would confine the adverse
25 impacts of contamination to a relatively small area.

26 Because construction-related spills are not uncommon, the probability of a spill occurring
27 is classified as “frequent” (more than once a year). However, because such spills are
28 typically short-term and localized, the potential consequence of such accidents is
29 classified as “slight,” resulting in a Risk Code of 4, which is “acceptable.” Construction
30 activities under Alternative 2 would not substantially increase the probable frequency and
31 severity of consequences to people from exposure to health hazards. Impacts would be
32 less than significant under CEQA.

33 **Operation**

34 Like Alternative 1, under Alternative 2 the YTI Terminal operations would accommodate
35 a maximum of 1,692,000 TEUs per year at maximum capacity (2026), compared to
36 996,109 TEUs under CEQA baseline conditions (January 2012 to December 2012). This
37 increased volume would increase the chance of a fire or explosion at the terminal. The
38 handling and storing of increased quantities of hazardous materials would increase the
39 probability of a local accident involving a release, spill, fire, or explosion, which would
40 be proportional to the size of the terminal and TEUs at the site as addressed in Impact
41 RISK-1.

42 Given the annual number of truck trips under Alternative 2 would be the same as under
43 Alternative 1, the potential for increased injury and/or fatality to occur under Alternative
44 2 relative to CEQA baseline conditions would be the same as was determined for

1 Alternative 1 in Table 3.9-10, thereby resulting in a Risk Code of 3. An impact with a
2 Risk Code of 3 is classified as “acceptable” with additional engineering or administrative
3 controls to mitigate the adverse impacts, according to the LACFD risk criticality (Table
4 3.9-4). The same administrative controls that would occur under the proposed Project
5 would also occur under Alternative 2. Due to the implementation of these administrative
6 controls, Alternative 2 operations would not substantially increase the probable frequency
7 and severity of consequences to people from exposure to health hazards, and potential
8 impacts under CEQA would be considered less than significant.

9 ***Mitigation Measure***

10 No mitigation is required.

11 ***Residual Impacts***

12 Impacts would be less than significant.

13 **NEPA Impact Determination**

14 Alternative 2 would include only backlands improvements consisting of slurry sealing;
15 deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or
16 modification of any underground conduits and pipes necessary to complete repairs. No
17 construction of in-water or over-water features would occur under Alternative 2. The No
18 Federal Action Alternative would involve the same construction activities as would occur
19 under the NEPA baseline. Therefore, there would be no incremental difference between
20 Alternative 2 and the NEPA baseline. As a consequence, Alternative 2 would result in no
21 impact under NEPA.

22 ***Mitigation Measures***

23 No mitigation is required.

24 ***Residual Impacts***

25 No impacts would occur.

26 **Impact RISK-3: Alternative 2 would not substantially interfere with**
27 **an existing emergency response or emergency evacuation plan,**
28 **thereby increasing risk of injury or death.**

29 **CEQA Impact Determination**

30 ***Construction***

31 Emergency response and evacuation planning is a shared responsibility among LAPD,
32 LAFD, Los Angeles Port Police, and USCG. YTI has an Emergency Action Plan in
33 place for its employees to help prevent and respond to emergency situations when they
34 arise. Construction related to Alternative 2 would occur on site and is not expected to
35 interfere with emergency responses or evacuation plans. The contractor would
36 coordinate with LAPD, LAFD, Port Police, and USCG, and construction activities would
37 be subject to emergency response and evacuation systems implemented by LAFD. All
38 standard procedures for activities occurring on Port property and within the Port area, as
39 discussed under Impact RISK-3 for the proposed Project, would be followed during
40 construction of Alternative 2, and the contractor would coordinate with the agencies
41 responsible for the emergency response and evacuation planning. The nominal

1 construction planned under Alternative 2 would incorporate planning to ensure that
2 possible interference with emergency response and evacuation plans does not occur. As
3 such, emergency access to these sites would not be adversely impacted during
4 construction. Therefore, impacts would be less than significant under CEQA.

5 ***Operation***

6 Under Alternative 2, the YTI Terminal would continue to operate as a container terminal
7 handling cargo and freight. Therefore, Alternative 2 would not interfere with any
8 existing contingency plans, because the current activities are consistent with the
9 contingency plans and Alternative 2 would not add any additional activities that would be
10 inconsistent with these plans.

11 All emergency response and evaluation plans and procedures as described under Impact
12 RISK-3 for the proposed Project would apply during Alternative 2 operations. YTI
13 Terminal personnel, including laborers and equipment operators, would be trained in
14 emergency response and evacuation procedures, and all contractors would be required to
15 adhere to plan requirements.

16 Because the terminal would continue to be operated as a container terminal, Alternative 2
17 operations would continue to be subject to emergency response and evacuation systems
18 implemented by LAHD and LAFD. Alternative 2 operations would not interfere with
19 any existing emergency response or emergency evacuation plans or increase the risk of
20 injury or death. Therefore, impacts would be less than significant under CEQA.

21 ***Mitigation Measures***

22 No mitigation is required.

23 ***Residual Impacts***

24 Impacts would be less than significant.

25 **NEPA Impact Determination**

26 Alternative 2 would include only backlands improvements consisting of slurry sealing;
27 deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or
28 modification of any underground conduits and pipes necessary to complete repairs. No
29 construction of in-water or over-water features would occur under Alternative 2. The No
30 Federal Action Alternative would involve the same construction activities as would occur
31 under the NEPA baseline. Therefore, there would be no incremental difference between
32 Alternative 2 and the NEPA baseline. As a consequence, Alternative 2 would result in no
33 impact under NEPA.

34 ***Mitigation Measures***

35 No mitigation is required.

36 ***Residual Impacts***

37 No impacts would occur.

1 **Impact RISK-4: Alternative 2 would comply with applicable**
2 **regulations and policies guiding development within the Port.**

3 **CEQA Impact Determination**

4 ***Construction***

5 Construction proposed under Alternative 2 would be subject to numerous regulations as
6 described in Section 3.9.3.1, List of Regulations. Implementation of increased inventory
7 accountability, spill prevention controls, and waste disposal controls associated with these
8 regulations would limit both the frequency and severity of potential releases of hazardous
9 materials.

10 LAHD maintains compliance with federal, state, and local laws discussed under Impact
11 RISK-4 for the proposed Project through a variety of methods, including internal
12 compliance reviews, preparation of regulatory plans, and agency oversight. These
13 regulations would be adhered to during construction under Alternative 2. Implementation
14 of increased spill prevention controls, spill release notification requirements, and waste
15 disposal controls associated with state and federal regulations would limit both the
16 frequency and severity of potential releases of hazardous materials.

17 Construction activities would be conducted using BMPs in accordance with City
18 guidelines. Proposed Alternative 2 construction plans and specifications would be
19 reviewed by LAFD for conformance to the LAFC, as a standard practice.
20 Implementation of increased spill prevention controls associated with these BMPs would
21 limit both the frequency and severity of potential releases of hazardous materials.
22 Therefore, impacts would be less than significant under CEQA.

23 ***Operation***

24 Alternative 2 operations would be subject to the same regulations and procedures as
25 described under Impact RISK-4 for the proposed Project. LAHD has implemented
26 various plans and programs to ensure compliance with these regulations, which must be
27 adhered to during Alternative 2 operations. The transport of hazardous materials in
28 containers on the street and highway system is regulated by Caltrans procedures and the
29 Standardized Emergency Management System, prescribed under Section 8607 of the
30 California Government Code. Any facilities identified as either a hazardous cargo
31 facility or a vulnerable resource would be required to conform to the RMP, which
32 includes packaging constraints and the provision of a separate storage area for hazardous
33 cargo.

34 LAHD maintains compliance with these state and federal laws through a variety of
35 methods, including internal compliance reviews, preparation of regulatory plans, and
36 agency oversight, most notably the Port RMP. Because container terminals are not
37 considered vulnerable resources, and because Alternative 2 would not expose the
38 residential or recreational users to increased risk (none are located next to the expansion
39 area), this alternative would not conflict with the RMP.

40 Plans and specifications of existing facilities have been reviewed by LAFD for
41 conformance to the LAFC, as a standard practice. Operation of Alternative 2 would be
42 required to comply with all existing hazardous waste laws and regulations, including the
43 federal RCRA and CERCLA, and CCR Title 22 and Title 26. Alternative 2 operations

1 would comply with these laws and regulations, which would ensure that potential
2 hazardous materials handling would occur in an acceptable manner. Alternative 2
3 operations would not conflict with RMP guidelines or the LAFC and would be required
4 to comply with all applicable existing hazardous waste laws and regulations. Therefore,
5 under CEQA, Alternative 2 operations would comply with applicable regulations and
6 policies guiding development in the Port. Impacts under CEQA would be less than
7 significant.

8 ***Mitigation Measures***

9 No mitigation is required.

10 ***Residual Impacts***

11 Impacts would be less than significant.

12 **NEPA Impact Determination**

13 Alternative 2 would include only backlands improvements consisting of slurry sealing;
14 deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or
15 modification of any underground conduits and pipes necessary to complete repairs. No
16 construction of in-water or over-water features would occur under Alternative 2. The No
17 Federal Action Alternative would involve the same construction activities as would occur
18 under the NEPA baseline. Therefore, there would be no incremental difference between
19 Alternative 2 and the NEPA baseline. As a consequence, Alternative 2 would result in no
20 impact under NEPA.

21 ***Mitigation Measures***

22 No mitigation is required.

23 ***Residual Impacts***

24 No impacts would occur.

25 **Impact RISK-5: Tsunami-induced flooding and seismic events could**
26 **result in fuel releases from ships or hazardous substances releases**
27 **from containers under Alternative 2, which in turn could result in**
28 **risks to persons and/or the environment.**

29 **CEQA Impact Determination**

30 ***Construction***

31 As discussed in Section 3.5, Geology, and RISK-5 under the proposed Project, there is
32 the potential for a major or great earthquake or large tsunami to affect the Port. Impacts
33 due to major or great earthquakes and seismically induced tsunamis and seiches are
34 typical for the entire California coastline and would not be increased by construction of
35 Alternative 2. As stated under RISK-5 for the proposed Project, based on the lowest deck
36 elevation (near the YTI Terminal) presented above and the data provided in the Port
37 Complex study, tsunami-induced flooding would not occur at the proposed project site
38 under any of the earthquake and landslide scenarios. Therefore, localized tsunami-
39 induced flooding is not expected to occur within the proposed project site. Either an
40 earthquake or a tsunami could lead to a fuel spill from construction equipment, as well as

1 from containers of petroleum products and hazardous substances used during the
2 construction period, if such events occur during construction. However, as described
3 under RISK-5 for the proposed Project, the volume spilled in the event of a tsunami
4 would likely be less than 10,000 gallons, which is considered “slight.” A major tsunami
5 is not expected during construction of Alternative 2, but could occur; thus, the probability
6 of a major tsunami occurring during construction of Alternative 2 is classified as
7 “improbable,” resulting in a Risk Code of 4, which is “acceptable.” In light of such a low
8 probability and acceptable risk of a large tsunami, impacts under CEQA would be less
9 than significant as they pertain to hazardous materials spills.

10 **Operation**

11 As discussed in Section 3.5, Geology, and under RISK-5 for the proposed Project, there
12 is the potential for a large tsunami to impact the Port. Based on the lowest deck elevation
13 (near the YTI Terminal) presented above and the data provided in the Port Complex
14 study, tsunami-induced flooding would not occur at the proposed project site under any
15 of the earthquake and landslide scenarios. Therefore, localized tsunami-induced flooding
16 is not expected to occur within the proposed project site. However, a large tsunami could
17 potentially lead to a fuel spill if a moored vessel is present, as each ship contains large
18 quantities of fuel oil (up to 5,000 barrels). While in transit, the tankers are exposed to
19 insignificant and, in most cases, imperceptible, hazards. However, a tsunami striking the
20 Port could cause significant ship movement to dock ships, including a hull breach, if the
21 ship is pushed against the wharf.

22 Impacts due to seismically induced tsunamis and seiches are typical for the entire
23 California coastline and would not be increased by Alternative 2 operations. Because a
24 major tsunami is not expected during the life of Alternative 2, but could occur (see
25 Section 3.5, Geology, and RISK-5 under the proposed Project for additional information
26 on the probability of a major tsunami and potential volume of spilled fuel), the
27 probability of a major tsunami occurring is classified as “improbable.” The consequence
28 of such an event is classified as “moderate,” resulting in a Risk Code of 4, which is
29 “acceptable.” Given that single-hulled vessels would not be used, there would be a
30 minimal chance of a substantive fuel spill. In light of the low probability and acceptable
31 risk of a large tsunami, impacts under CEQA would be less than significant as they
32 pertain to hazardous materials spills.

33 **Mitigation Measures**

34 No mitigation is required.

35 **Residual Impacts**

36 Impacts would be less than significant.

37 **NEPA Impact Determination**

38 Alternative 2 would include only backlands improvements consisting of slurry sealing;
39 deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or
40 modification of any underground conduits and pipes necessary to complete repairs. No
41 construction of in-water or over-water features would occur under Alternative 2. The No
42 Federal Action Alternative would involve the same construction activities as would occur
43 under the NEPA baseline. Therefore, there would be no incremental difference between

1 Alternative 2 and the NEPA baseline. As a consequence, Alternative 2 would result in no
2 impact under NEPA.

3 ***Mitigation Measures***

4 No mitigation is required.

5 ***Residual Impacts***

6 No impacts would occur.

7 **Impact RISK-6: Alternative 2–related terminal modifications would**
8 **not result in a measurable increase in the probability of a terrorist**
9 **attack and would not result in adverse consequences to the**
10 **proposed project site and nearby areas.**

11 **CEQA Impact Determination**

12 ***Construction***

13 Construction of Alternative 2 would result in similar probability of a terrorist attack as
14 described for the proposed Project: it is not likely to appreciably change over existing
15 conditions. The proposed Alternative 2 site is an existing container terminal and would
16 not constitute a new potential target for terrorists. The potential for unauthorized access
17 to the terminal site during construction by land, water, and/or air is limited. Compliance
18 with maritime security regulations, including the MTSA and ISPS Code, and
19 implementation and enforcement of existing Port and terminal security measures by
20 LAHD, YTI, and U.S. CBP would counter any potential increase in unauthorized access
21 to the terminal site due to the use of increased construction vehicles during the planned
22 minor construction activities. Berths 212–213 and Berths 214–216 would remain
23 operational during construction; therefore, the risks associated with terrorism discussed in
24 Section 3.9.2.3 and discussed under the proposed Project above would also apply to the
25 terminal during construction of Alternative 2. The potential for a terrorist attack that
26 could result in catastrophic consequences (greater than 100 injuries or 10 fatalities) to
27 areas near the proposed project site during the construction period is considered
28 extraordinarily improbable given the limited construction duration and the limited access
29 to the construction areas. This combination would result in a Risk Code of 4, which is
30 “acceptable,” and impacts would be less than significant under CEQA.

31 ***Operation***

32 An increase in the number of container vessels calling at the YTI Terminal under
33 Alternative 2 would not change the probability or consequences of a terrorist attack on
34 the terminal, because it is already considered a potential economic target, and increased
35 throughput is not expected to affect any motivation for a potential attack. The risks
36 associated with terrorism discussed under the proposed Project above would also apply to
37 the terminal during operation of Alternative 2. Compliance with maritime security
38 regulations, including the MTSA and ISPS Code, would minimize any potential increase
39 in the risk of terrorist attacks during operation of Alternative 2. Implementation and
40 enforcement of security measures by LAHD, YTI, and U.S. CBP would serve to counter
41 the potential for increase in unauthorized access to the terminal due to increased vessel
42 traffic and help minimize any potential increase in risk of a successful terrorist attack.
43 Alternative 2 would not change the seriousness of the consequences of a terrorist action

1 on a container terminal, which could be catastrophic, specifically in terms of
2 environmental and economic impacts. However, these impacts would likely be limited to
3 the area surrounding the point of attack and would be responded to by emergency
4 response providers. Potential impacts to the environment are addressed in specific
5 resource sections, including Section 3.2, Air Quality and Meteorology; Section 3.3,
6 Biological Resources; and Section 3.15, Water Quality, Sediments, and Oceanography.
7 Security initiatives have improved both terminal and cargo security and have resulted in
8 enhanced cargo screening. Therefore, potential impacts under CEQA associated with a
9 potential terrorist attack on the YTI Terminal are considered less than significant.

10 ***Mitigation Measures***

11 No mitigation is required.

12 ***Residual Impacts***

13 Impacts would be less than significant.

14 **NEPA Impact Determination**

15 Alternative 2 would include only backlands improvements consisting of slurry sealing;
16 deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or
17 modification of any underground conduits and pipes necessary to complete repairs. No
18 construction of in-water or over-water features would occur under Alternative 2. The No
19 Federal Action Alternative would involve the same construction activities as would occur
20 under the NEPA baseline. Therefore, there would be no incremental difference between
21 Alternative 2 and the NEPA baseline. As a consequence, Alternative 2 would result in no
22 impact under NEPA.

23 ***Mitigation Measures***

24 No mitigation is required.

25 ***Residual Impacts***

26 No impacts would occur.

27 **Alternative 3 – Reduced Project: Improve Berths 217—220 Only**

28 This alternative includes all components of the proposed Project except dredging and pile
29 driving at Berths 214–216. The following components of the proposed Project are
30 unchanged under the Reduced Project Alternative:

- 31 ▪ modifying up to six existing cranes;
- 32 ▪ replacing up to four existing non-operating cranes;
- 33 ▪ dredging 6,000 cy from a depth of -45 to -47 feet MLLW (with an additional
34 2 feet of overdredge depth, for a total depth of -49 feet MLLW), and installing
35 1,200 linear feet of sheet piles and king piles to support and stabilize the existing
36 wharf structure at Berths 217–220;
- 37 ▪ disposing of dredged material at LA-2, the Berths 243–245 CDF, or another
38 approved upland location;

- 1 ▪ extending the existing 100-foot gauge landside crane rail through Berths 217–
- 2 220;
- 3 ▪ performing ground repairs and maintenance activities in the backlands area; and
- 4 ▪ expanding the TICTF on-dock rail by adding a single rail loading track.

5 Under this alternative, there would be three operating berths after construction, similar to
6 the proposed Project, but Berths 214–216 would remain at their existing depth. This
7 alternative would require less dredging (by approximately 21,000 cy) and pile driving
8 and a shorter construction period than the proposed Project. Based on the throughput
9 projections, this alternative is expected to operate at its capacity of approximately
10 1,913,000 TEUs by 2026, similar to the proposed Project. However, while the terminal
11 could handle similar levels of cargo, the reduced project alternative would not achieve the
12 same level of efficient operations as achieved by the proposed Project. This alternative
13 would not accommodate the largest vessels (13,000 TEUs). The depth achieved at Berths
14 217–220 would only be capable of handling vessels up to 11,000 TEUs, requiring
15 additional vessels to call on the terminal to meet future growth projections up to the
16 capacity of the terminal. Therefore, under this alternative, 232 vessels would call on the
17 terminal in 2020 and 2026, compared to 206 vessels for the proposed Project.
18 Additionally, because of the higher number of annual vessel calls, this alternative would
19 result in a maximum of five peak day ship calls (over a 24-hour period) compared to four
20 for the proposed Project.

21 **Impact RISK-1: Alternative 3 would not substantially increase the**
22 **probable frequency and severity of consequences to people or**
23 **property as a result of accidental release or explosion of a hazardous**
24 **substance.**

25 **CEQA Impact Determination**

26 ***Construction***

27 As described for proposed project-related construction activities under RISK-2,
28 construction under Alternative 3 would be conducted using BMPs in accordance with
29 City guidelines and in compliance with federal and state regulations governing hazardous
30 materials, the State General Permit for Storm Water Discharges Associated with
31 Construction Activity (Construction General Permit Order 2009-0009-DWQ), and the
32 proposed Project-specific SWPPP that has been prepared in accordance with California
33 NPDES permit CAS000001 2013 (Hansen pers. comm.).

34 Construction equipment associated with Alternative 3 could result in accidental spills of
35 oil, gas, or fluids during normal usage or during refueling, resulting in potential health
36 and safety impacts to not only construction personnel, but to people and property
37 occupying operational portions of the proposed project area. However, it is unlikely that
38 construction activities would involve the use of substantial quantities of hazardous
39 materials, and the most likely spills or releases of hazardous materials during
40 construction would involve petroleum products, such as diesel fuel, gasoline, oils, and
41 lubricants from vehicle at the site. Because construction-related spills are not
42 uncommon, the probability of a spill occurring is classified as “frequent” (more than once
43 a year). However, such spills are typically short-term and localized. This is attributable
44 to the fact that the volume in any single source vehicle is generally less than 50 gallons,
45 and fuel trucks that might be present at the site would be limited to 10,000 gallons or less.

1 Thus, the potential consequence of such accidents is classified as “slight,” resulting in a
2 Risk Code of 4, which is “acceptable.”

3 However, there is also potential for release of contaminated soils from dredging
4 approximately 27,000 cubic yards at Berths 214–216 and Berths 217–220. All of the
5 dredged material would be disposed of at an approved site, which may include LA-2, the
6 Berths 243–245 CDF, or another approved location. A sampling and analysis program
7 would be implemented to determine suitability for any offshore disposal of material at
8 LA-2. In addition, any contaminated soil or groundwater encountered during
9 construction of Alternative 3 would be handled, transported, remediated, or disposed of
10 in accordance with all applicable federal, state, and local laws and regulations and in
11 accordance with the regulatory lead agency and LAHD mitigation measures pertaining to
12 site remediation (GW-1) and development of a contamination contingency plan (GW-2)
13 (see Section 3.8, Groundwater and Soils).

14 Proposed construction activities under Alternative 3 would not substantially increase the
15 probable frequency and severity of consequences to people or property as a result of an
16 accidental release or explosion of a hazardous substance. Impacts would be less than
17 significant under CEQA.

18 **Operation**

19 As described for the proposed Project, terminal operations would be subject to safety
20 regulations that govern the shipping, transport, storage, and handling of hazardous
21 materials, which would limit the severity and frequency of potential releases of hazardous
22 materials resulting in increased exposure of people to health hazards. In addition, the
23 USDOT Hazardous Materials Regulations (49 CFR 100–185) regulate almost all aspects
24 of terminal operations. Implementation of increased hazardous materials inventory control
25 and spill prevention controls associated with state and federal regulations would limit both
26 the frequency and severity of potential releases of hazardous materials. Quantities of
27 hazardous materials used in terminal maintenance activities that exceed the thresholds
28 provided in Chapter 6.95 of the California Health and Safety Code would be subject to an
29 RRP and an HMI, which would limit both the frequency and severity of potential releases
30 of hazardous materials. Limited quantities of hazardous materials used at the terminal
31 that are below the thresholds of Chapter 6.95 would not likely result in a substantial
32 spillage into the environment.

33 As with the proposed Project, under Alternative 3 the YTI Terminal site would
34 accommodate a maximum of 1,913,000 TEUs per year at maximum capacity (2026),
35 compared to 996,109 TEUs under CEQA baseline conditions (January 2012 to December
36 2012), which would represent almost a twofold increase in containerized cargo compared
37 to the CEQA baseline, and thus the potential for an accidental release or explosion of
38 hazardous materials would also be expected to increase proportionally. Under
39 Alternative 3, 232 vessels would call on the terminal in 2020 and 2026 for the YTI
40 Terminal to reach its operating capacity of 1,913,000 TEUs. As determined for the
41 proposed Project in Table 3.9-5, the frequency of potential Alternative 3-related spills
42 would also increase to 2.2 spills per year from 1.1 spills under the baseline, which
43 equates to an increase in the number of annual spills by 1.1 under Alternative 3. This
44 increase in spill frequency would be classified as “frequent” (greater than once per year),
45 and the consequence of such accidents is classified as “slight,” resulting in a Risk Code
46 of 4, which is “acceptable.” Compliance with applicable federal, state, and local laws
47 and regulations governing the transport of hazardous materials and emergency response

1 to hazardous material spills, as described above, would minimize the potential for adverse
2 public health impacts. Therefore, under CEQA, Alternative 3 operations would not
3 substantially increase the probable frequency and severity of consequences to people or
4 property as a result of an accidental release or explosion of a hazardous substance.
5 Impacts under CEQA would be less than significant.

6 ***Mitigation Measures***

7 No mitigation is required.

8 ***Residual Impacts***

9 Impacts would be less than significant.

10 **NEPA Impact Determination**

11 ***Construction***

12 As discussed above, construction activities associated with Alternative 3 would not
13 substantially increase the probable frequency and severity of consequences to people or
14 property as a result of an accidental release or explosion of a hazardous substance.
15 Impacts under NEPA would be less than significant.

16 ***Operation***

17 As with the proposed Project, under Alternative 3 YTI Terminal operations could handle
18 approximately 1,913,000 TEUs per year when optimized and functioning at maximum
19 capacity (2026), as compared to the NEPA baseline (2026) of 1,692,000 TEUs. This
20 would equate to an approximately 1.1-fold increase in containerized cargo compared to
21 the NEPA baseline, thereby proportionally increasing the potential for an accidental
22 release or explosion of hazardous materials. As determined for the proposed Project in
23 Table 3.9-6, the frequency of potential Alternative 3-related spills would also increase to
24 2.2 spills per year from 1.9 spills under the NEPA baseline, which equates to an increase
25 in the number of annual spills by 0.3 under Alternative 3. This increase in spill frequency
26 would be classified as “periodic” (between once per year and once in ten years), and the
27 consequence of such accidents is classified as “slight,” resulting in a Risk Code of
28 4, which is “acceptable.” Compliance with applicable federal, state, and local laws and
29 regulations governing the transport of hazardous materials and emergency response to
30 hazardous material spills, as described above, would minimize the potential for adverse
31 public health impacts. Therefore, under NEPA, Alternative 3 operations would not
32 substantially increase the probable frequency and severity of consequences to people or
33 property as a result of an accidental release or explosion of a hazardous substance.
34 Impacts under NEPA would be less than significant.

35 ***Mitigation Measures***

36 No mitigation is required.

37 ***Residual Impacts***

38 Impacts would be less than significant.

1 **Impact RISK-2: Alternative 3 would not substantially increase the**
2 **probable frequency and severity of consequences to people from**
3 **exposure to health hazards.**

4 **CEQA Impact Determination**

5 ***Construction***

6 Under Alternative 3, no dredging and pile driving would occur at Berths 214–216 and the
7 construction period would be shorter relative to the proposed Project.

8 As with the proposed Project, all construction activities would be conducted using BMPs
9 and in accordance with City guidelines. Quantities of hazardous materials that exceed the
10 thresholds provided in Chapter 6.95 of the California Health and Safety Code would be
11 subject to an RRP and an HMI, which would minimize potential health hazards and/or
12 contamination of soil or water during construction activities. Impacts from
13 contamination of soil or water during construction activities would apply to not only
14 construction personnel, but to people and property occupying operational portions of the
15 project area, as Berths 212–213 and Berths 214–216 would be operating during
16 construction activities at Berths 217–220 and other terminal improvements.

17 Hazardous materials shipped, transported, handled, or otherwise stored would be in
18 compliance with the RMP, USCG regulations, fire department requirements, and state
19 and federal departments of transportation regulations (49 Part 176). Implementation of
20 the abovementioned preventative measures would minimize the potential for spills to
21 affect members of the public, including on-site employees, and would confine the adverse
22 impacts of contamination to a relatively small area.

23 Because construction-related spills are not uncommon, the probability of a spill occurring
24 is classified as “frequent” (more than once a year). However, because such spills are
25 typically short-term and localized, the potential consequence of such accidents is
26 classified as “slight,” resulting in a Risk Code of 4, which is “acceptable.” Construction
27 activities under Alternative 3 would not substantially increase the probable frequency and
28 severity of consequences to people from exposure to health hazards. Impacts would be
29 less than significant under CEQA.

30 ***Operation***

31 Alternative 3 would include siting facilities that would potentially handle hazardous
32 materials and increase other hazards to the public. The handling and storing of increased
33 quantities of hazardous materials (in containers) would increase the probability of a local
34 accident involving a release, spill, fire or explosion, which is proportional to the size of
35 the terminal and its throughput.

36 However, it is expected that the projected increase in terminal operations under
37 Alternative 3 would proportionally increase the potential truck transportation-related
38 accidents. Potential Alternative 3-related increases in truck trips could result in an
39 increase in vehicular accidents, injuries, and fatalities. Therefore, the potential impact of
40 increased truck traffic on regional injury and fatality rates are evaluated.

41 Given that the annual number of truck trips under Alternative 3 would be the same as
42 under the proposed Project, the potential for increased injury and/or fatality to occur

1 under Alternative 3 relative to CEQA baseline conditions would be the same as was
2 determined for the proposed Project in Table 3.9-7, thereby resulting in a Risk Code of 3.
3 An impact with a Risk Code of 3 is classified as “acceptable” with additional engineering
4 or administrative controls to mitigate the adverse impacts, according to the LACFD risk
5 criticality (Table 3.9-4). The same administrative controls that would occur under the
6 proposed Project would also occur under Alternative 3. Due to the implementation of
7 these administrative controls, Alternative 3 operations would not substantially increase
8 the probable frequency and severity of consequences to people from exposure to health
9 hazards, and potential impacts under CEQA would be considered less than significant.

10 ***Mitigation Measures***

11 No mitigation is required.

12 ***Residual Impacts***

13 Impacts would be less than significant.

14 **NEPA Impact Determination**

15 ***Construction***

16 As discussed above, construction activities under Alternative 3 would not substantially
17 increase the probable frequency and severity of consequences to people from exposure to
18 health hazards. Based on criterion RISK-2, impacts would be less than significant under
19 NEPA.

20 ***Operation***

21 Because projected terminal operations under Alternative 3 would accommodate
22 approximately a 1.1-fold increase in containerized cargo compared to the NEPA baseline,
23 the potential for increased truck transportation-related accidents would also occur.

24 Potential Alternative 3-related truck accident rates can be estimated based on national
25 average accident rates and the average number of miles per cargo truck trip. Given that
26 the annual number of truck trips under Alternative 3 would be the same as under the
27 proposed Project, the potential for increased injury and/or fatality to occur under
28 Alternative 3 relative to the NEPA baseline conditions would be the same as was
29 determined for the proposed Project in Table 3.9-8, thereby resulting in a Risk Code of 4.
30 An impact with a Risk Code of 4 is classified as “acceptable” and would be less than
31 significant. Therefore, potential impacts under NEPA would be considered less than
32 significant.

33 ***Mitigation Measures***

34 No mitigation is required.

35 ***Residual Impacts***

36 Impacts would be less than significant.

1 **Impact RISK-3: Alternative 3 would not substantially interfere with**
2 **an existing emergency response or evacuation plans, thereby**
3 **increasing risk of injury or death.**

4 **CEQA Impact Determination**

5 ***Construction***

6 Emergency response and evacuation planning is the responsibility of LAPD, LAFD, Port
7 Police, and USCG. YTI also has an Emergency Action Plan in place for its employees to
8 help prevent and respond to emergency situations. Construction activities would be
9 subject to emergency response and evacuation systems implemented by LAFD. During
10 construction activities, LAFD would require that adequate vehicular access to the site be
11 provided and maintained. Prior to commencement of construction activities, all plans
12 would be reviewed by LAFD to ensure adequate access is maintained throughout
13 construction. All standard procedures for activities occurring on Port property and within
14 the Port area, as discussed under Impact RISK-3 for the proposed Project, would be
15 followed during construction of Alternative 3, and the contractor would coordinate with
16 the agencies responsible for the emergency response and evacuation planning.

17 Alternative 3 contractors would be required to adhere to all LAFD emergency response
18 and evacuation regulations, ensuring compliance with existing emergency response plans.
19 Therefore, under CEQA, construction activities associated with Alternative 3 would not
20 substantially interfere with an existing emergency response or evacuation plan or increase
21 risk of injury or death. Impacts under CEQA would be less than significant.

22 ***Operation***

23 The YTI Terminal would continue to operate as a container terminal; therefore, proposed
24 terminal operations would not interfere with any existing contingency plans, because the
25 current activities are consistent with the contingency plans, and Alternative 3 would not
26 add any additional activities that would be inconsistent with existing contingency plans.
27 In addition, existing oil spill contingency and emergency response plans for the site
28 would be revised to incorporate proposed facility and operational changes. Because
29 existing management plans are commonly revised to incorporate terminal operation
30 changes, conflicts with existing contingency and emergency response plans are not
31 anticipated.

32 All emergency response and evaluation plans and procedures as described under Impact
33 RISK-3 for the proposed Project would apply during Alternative 3 operations. YTI
34 Terminal personnel, including laborers and equipment operators, would be trained in
35 emergency response and evacuation procedures, and all contractors would be required to
36 adhere to plan requirements.

37 Alternative 3 would continue to operate as a container terminal similar to other terminal
38 operations in the Port area, and Alternative 3 operations would be subject to emergency
39 response and evacuation systems implemented by LAHD and LAFD. Thus, Alternative 3
40 operations would not interfere with any existing emergency response or emergency
41 evacuation plans or increase the risk of injury or death, and impacts would be less than
42 significant under CEQA.

43 ***Mitigation Measures***

44 No mitigation is required.

1 ***Residual Impacts***

2 Impacts would be less than significant.

3 **NEPA Impact Determination**

4 ***Construction***

5 Alternative 3 contractors would be required to adhere to all LAFD emergency response
6 and evacuation regulations, ensuring compliance with existing emergency response plans.
7 Therefore, under NEPA, construction activities associated with Alternative 3 would not
8 substantially interfere with an existing emergency response or evacuation plan or increase
9 risk of injury or death. Impacts under NEPA would be less than significant.

10 ***Operation***

11 Alternative 3 would continue to operate as a container terminal similar to other terminal
12 operations in the Port area, and Alternative 3 operations would be subject to emergency
13 response and evacuation systems implemented by LAHD and LAFD. Thus, Alternative 3
14 operations would not interfere with any existing emergency response or emergency
15 evacuation plans or increase the risk of injury or death, and impacts would be less than
16 significant under NEPA based on criterion RISK-3.

17 ***Mitigation Measures***

18 No mitigation is required.

19 ***Residual Impacts***

20 Impacts would be less than significant.

21 **Impact RISK-4: Alternative 3 would comply with applicable
22 regulations and policies guiding development within the Port.**

23 **CEQA Impact Determination**

24 ***Construction***

25 As described in Section 3.9.3.1, List of Regulations, Alternative 3 would be subject to
26 numerous regulations during construction. Implementation of increased inventory
27 accountability, spill prevention controls, and waste disposal controls associated with state
28 and federal regulations would limit both the frequency and severity of potential releases of
29 hazardous materials.

30 LAHD maintains compliance with federal, state, and local laws discussed under Impact
31 RISK-4 for the proposed Project through a variety of methods, including internal
32 compliance reviews, preparation of regulatory plans, and agency oversight. These
33 regulations would be adhered to during construction proposed under Alternative 3.
34 Implementation of increased spill prevention controls, spill release notification
35 requirements, and waste disposal controls associated with these regulations would limit
36 both the frequency and severity of potential releases of hazardous materials.

37 Construction activities would be conducted using BMPs in accordance with City
38 guidelines, and implementation of increased spill prevention controls associated with

1 BMPs would limit both the frequency and severity of potential releases of hazardous
2 materials.

3 As with the proposed Project, because Alternative 3 construction would be completed
4 using standard BMPs and in accordance with LAHD plans and programs, LAFD
5 regulations, LAMC requirements, and all applicable hazardous waste laws and
6 regulations, potential impacts relating to compliance with applicable regulations and
7 policies guiding development in the Port would be less than significant under CEQA.

8 ***Operation***

9 Alternative 2 operations would be subject to the same regulations and procedures as
10 described under Impact RISK-4 for the proposed Project. LAHD has implemented
11 various plans and programs to ensure compliance with its regulations, which must be
12 adhered to during terminal operation. The transport of hazardous materials in containers
13 on the street and highway system is regulated by Caltrans procedures and the
14 Standardized Emergency Management System prescribed under Section 8607 of the
15 California Government Code. In addition, any facility constructed at the site, identified
16 as either a hazardous cargo facility or a vulnerable resource, would be required to
17 conform to the RMP, which includes packaging constraints and the provision of a
18 separate storage area for hazardous cargo.

19 LAHD maintains compliance with these state and federal laws through a variety of
20 methods, including internal compliance reviews, preparation of regulatory plans, and
21 agency oversight, most notably the Port RMP. Because Alternative 3 would not increase
22 the exposure of the residential or recreational users to increased risk (none are located
23 next to the expansion area), this alternative would not conflict with the RMP.

24 Alternative 3 plans and specifications would be reviewed by LAFD for conformance to
25 the LAFC, as a standard practice. Operation of Alternative 3 would be required to
26 comply with all existing hazardous waste laws and regulations, including the federal
27 RCRA and CERCLA, and CCR Title 22 and Title 26. Alternative 3 operations would
28 comply with these laws and regulations, which would ensure that potential hazardous
29 materials handling would occur in an acceptable manner. Alternative 3 operations would
30 not conflict with RMP guidelines or the LAFC and would be required to comply with all
31 applicable existing hazardous waste laws and regulations. Therefore, under CEQA,
32 Alternative 3 operations would comply with applicable regulations and policies guiding
33 development in the Port. Impacts under CEQA would be less than significant.

34 ***Mitigation Measures***

35 No mitigation is required.

36 ***Residual Impacts***

37 Impacts would be less than significant.

38 **NEPA Impact Determination**

39 ***Construction***

40 As with the proposed Project, because Alternative 3 construction would be completed
41 using standard BMPs and in accordance with LAHD plans and programs, LAFD
42 regulations, LAMC requirements, and all applicable hazardous waste laws and

1 regulations, impacts relating to compliance with applicable regulations and policies
2 guiding development in the Port would be less than significant under NEPA.

3 ***Operation***

4 Alternative 3 operations would not conflict with RMP guidelines. Alternative 3 plans
5 and specifications would be reviewed by LAFD for conformance to the LAFC, and
6 operation of Alternative 3 would be required to comply with all applicable existing
7 hazardous waste laws and regulations. Operations under Alternative 3 would comply
8 with applicable regulations and policies guiding development in the Port. Therefore,
9 impacts under NEPA would be less than significant.

10 ***Mitigation Measures***

11 No mitigation is required.

12 ***Residual Impacts***

13 Impacts would be less than significant.

14 **Impact RISK-5: Tsunami-induced flooding and seismic events could**
15 **result in fuel releases from construction equipment, ships, or**
16 **hazardous substances releases from containers under Alternative 3,**
17 **which in turn could result in risks to persons and/or the**
18 **environment.**

19 **CEQA Impact Determination**

20 ***Construction***

21 As discussed in Section 3.5, Geology, and RISK-5 under the proposed Project, there is
22 the potential for a major or great earthquake or large tsunami to affect the Port. Impacts
23 due to major or great earthquakes and seismically induced tsunamis and seiches are
24 typical for the entire California coastline and would not be increased by construction of
25 Alternative 3. Based on the lowest deck elevation (near the YTI Terminal) presented
26 above and the data provided in the Port Complex study, tsunami-induced flooding would
27 not occur at the proposed project site under any of the earthquake and landslide scenarios.
28 Therefore, localized tsunami-induced flooding is not expected to occur within the
29 proposed project site. Either an earthquake or a tsunami could lead to a fuel spill from
30 construction equipment, as well as from containers of petroleum products and hazardous
31 substances used during the construction period, if such events occur during construction.
32 However, as discussed under RISK-5 for the proposed Project, the volume spilled in the
33 event of a tsunami is expected to be low and would likely be less than 10,000 gallons,
34 which is considered “slight.” A major tsunami is not expected during construction of
35 Alternative 3, but could occur; thus, the probability of a major tsunami occurring during
36 construction of Alternative 3 is classified as “improbable,” resulting in a Risk Code of 4,
37 which is “acceptable.” In light of such a low probability and acceptable risk of a large
38 tsunami, impacts under CEQA would be less than significant as they pertain to hazardous
39 materials spills.

40 ***Operation***

41 As discussed in Section 3.5, Geology, and under RISK-5 for the proposed Project, there
42 is the potential for a large tsunami to impact the Port. Based on the lowest deck elevation

1 (near the YTI Terminal) presented above and the data provided in the Port Complex
2 study, tsunami-induced flooding would not occur at the proposed project site under any
3 of the earthquake and landslide scenarios. Therefore, localized tsunami-induced flooding
4 is not expected to occur within the proposed project site. However, a large tsunami
5 would potentially lead to a fuel spill if a moored vessel is present. While in transit, the
6 tankers are exposed to insignificant and, in most cases, imperceptible, hazards. However,
7 a tsunami striking the Port could cause significant ship movement to docked ships,
8 including a hull breach, if the ship is pushed against the wharf.

9 Because a major tsunami is not expected during the life of Alternative 3, but could occur
10 (see Section 3.5, Geology, and RISK-5 under the proposed Project for additional
11 information on the probability of a major tsunami and potential volume of spilled fuel),
12 the probability of a major tsunami occurring is classified as “improbable.” The
13 consequence of such an event is classified as “moderate,” resulting in a Risk Code of 4,
14 which is “acceptable.” Given that single-hulled vessels would not be used, there would
15 be a minimal chance of a substantive fuel spill. In light of the low probability and
16 acceptable risk of a large tsunami, impacts under CEQA would be less than significant as
17 they pertain to hazardous materials spills.

18 ***Mitigation Measures***

19 No mitigation is required.

20 ***Residual Impacts***

21 Impacts would be less than significant.

22 **NEPA Impact Determination**

23 ***Construction***

24 The volume spilled in the event of a tsunami would likely be less than 10,000 gallons,
25 which is considered “slight.” A major tsunami is not expected during construction of
26 Alternative 3, but one could occur; therefore, the probability of a major tsunami
27 occurring during construction of the proposed Project is classified as “improbable,”
28 resulting in a Risk Code of 4, which is “acceptable.” In light of such low probability and
29 acceptable risk of a large tsunami or other seismic risk, impacts under NEPA associated
30 with Alternative 3 would be less than significant.

31 ***Operation***

32 A major tsunami is not expected during the life of Alternative 3, but one could occur;
33 therefore, the probability of a major tsunami occurring is classified as “improbable.” The
34 potential consequence of such an event would be classified as “moderate,” resulting in a
35 Risk Code of 4, which is “acceptable.” In light of the low probability and acceptable risk
36 of a large tsunami, impacts under NEPA would be less than significant as they pertain to
37 hazardous materials spills.

38 ***Mitigation Measures***

39 No mitigation is required.

40 ***Residual Impacts***

41 Impacts would be less than significant.

1 **Impact RISK-6: Alternative 3–related terminal modifications would**
2 **not result in a measurable increase in the probability of a terrorist**
3 **attack and would not result in adverse consequences to the**
4 **proposed project site and nearby areas.**

5 **CEQA Impact Determination**

6 ***Construction***

7 Construction of Alternative 3 would result in similar probability of a terrorist attack as
8 described for the proposed Project: it is not likely to appreciably change over existing
9 conditions. The proposed Alternative 3 site is an existing container terminal and would
10 not constitute a new potential target for terrorists. The potential for unauthorized access
11 to the terminal site during construction by land, water, and/or air is limited. Compliance
12 with maritime security regulations, including the MTSA and ISPS Code, and
13 implementation and enforcement of existing Port and terminal security measures by
14 LAHD, YTI, and U.S. CBP would counter any potential increase in unauthorized access
15 to the terminal site due to increased construction vehicular traffic. The YTI Terminal
16 would be operating during the construction period; therefore, the risks associated with
17 terrorism discussed in Section 3.9.2.3 and under the proposed Project above would also
18 apply to the terminal during construction under Alternative 3. The potential for a terrorist
19 attack that could result in catastrophic consequences (greater than 100 injuries or 10
20 fatalities) to areas near the proposed project site during the construction period is
21 considered extraordinarily improbable given the limited construction duration and the
22 limited access to the construction areas. This combination would result in a Risk Code of
23 4, which is “acceptable,” and impacts would be less than significant under CEQA.

24 ***Operation***

25 An increase in the number of container vessels calling at the YTI Terminal under
26 Alternative 3 would not change the probability or consequences of a terrorist attack on
27 the terminal, because it is already considered a potential economic target, and increased
28 throughput is not expected to affect any motivation for a potential attack. The risks
29 associated with terrorism discussed under the proposed Project above would also apply to
30 the terminal during construction and operation of Alternative 3. Compliance with
31 maritime security regulations, including the MTSA and ISPS Code, would minimize any
32 potential increase in the risk of terrorist attacks during operation of Alternative 3.
33 Implementation and enforcement of security measures by LAHD, YTI, and U.S. CBP
34 would serve to counter the potential for increase in unauthorized access to the terminal
35 due to increased vessel traffic and help minimize any potential increase in risk of a
36 successful terrorist attack. Alternative 3 would not change the seriousness of the
37 consequences of a terrorist action on a container terminal, which could be catastrophic,
38 specifically in terms of environmental and economic impacts. However, these impacts
39 would likely be limited to the area surrounding the point of attack and would be
40 responded to by emergency response providers. Potential impacts to the environment are
41 addressed in specific resource sections, including Section 3.2, Air Quality and
42 Meteorology; Section 3.3, Biological Resources; and Section 3.15, Water Quality,
43 Sediments, and Oceanography. Security initiatives have improved both terminal and
44 cargo security and have resulted in enhanced cargo screening. Therefore, potential
45 impacts under CEQA associated with a potential terrorist attack on the YTI Terminal are
46 considered less than significant.

1 **Mitigation Measures**

2 No mitigation is required.

3 **Residual Impacts**

4 Impacts would be less than significant.

5 **NEPA Impact Determination**

6 **Construction**

7 The potential for unauthorized access to the terminal site during construction by land,
8 water, and/or air is limited. Existing Port and terminal security measures would counter
9 any potential increase in unauthorized access to the terminal site through the use of
10 vehicles or vessels. The potential for a terrorist attack that would result in catastrophic
11 consequences (greater than 100 injuries or 10 fatalities) to areas near the Alternative 3
12 site during the construction period is considered extraordinarily improbable given the
13 limited construction duration and the limited access to the construction areas. This
14 combination would result in a Risk Code of 4 that is “acceptable”; therefore, impacts
15 under NEPA would be less than.

16 **Operation**

17 Alternative 3 would not change the vulnerability of the proposed project area or the
18 seriousness of the consequences. The environmental consequences of a terrorist action,
19 including threats to human health arising from the action and from the release, explosion,
20 or spill of hazardous materials would not substantially change. Security initiatives have
21 improved both terminal and cargo security, and have resulted in enhanced cargo
22 screening. Therefore, potential impacts under NEPA associated with a potential terrorist
23 attack on the YTI Terminal are considered less than significant.

24 **Mitigation Measures**

25 No mitigation is required.

26 **Residual Impacts**

27 Impacts would be less than significant.

28 **3.9.4.4 Summary of Impact Determinations**

29 Table 3.9-11 presents a summary of the CEQA and NEPA impact determinations of the
30 proposed Project and alternatives related to Hazards and Hazardous Materials, as
31 described above. This table is meant to allow easy comparison between the potential
32 impacts of the proposed Project and alternatives with respect to this resource. Identified
33 potential impacts may be based on federal, state, or City significance criteria; LAHD
34 criteria; and the scientific judgment of the report preparers.

35 For each impact threshold, the table describes the impact, notes the CEQA and NEPA
36 impact determinations, describes any applicable mitigation measures, and notes the
37 residual impacts (i.e., the impact remaining after mitigation). All impacts, whether
38 significant or not, are included in this table.

Table 3.9-11: Summary Matrix of Potential Impacts and Mitigation Measures for Hazards and Hazardous Materials Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Proposed Project	RISK-1: The proposed Project would not substantially increase the probable frequency and severity of consequences to people or property as a result of accidental release or explosion of a hazardous substance.	CEQA: Less than significant NEPA: Less than significant	No mitigation is required.	CEQA: Less than significant NEPA: Less than significant
	RISK-2: The proposed Project would not substantially increase the probable frequency and severity of consequences to people from exposure to health hazards.	CEQA: Less than significant NEPA: Less than significant	No mitigation is required.	CEQA: Less than significant NEPA: Less than significant
	RISK-3: The proposed Project would not substantially interfere with an existing emergency response or evacuation plan, thereby increasing the risk of injury or death.	CEQA: Less than significant NEPA: Less than significant	No mitigation is required.	CEQA: Less than significant NEPA: Less than significant
	RISK-4: The proposed Project would comply with applicable regulations and policies guiding development within the Port.	CEQA: Less than significant NEPA: Less than significant	No mitigation is required.	CEQA: Less than significant NEPA: Less than significant
	RISK-5: Tsunami-induced flooding and seismic events could result in fuel releases from construction equipment or hazardous substances releases from containers under the proposed Project, which in turn could result in risks to persons and/or the environment.	CEQA: Less than significant NEPA: Less than significant	No mitigation is required.	CEQA: Less than significant NEPA: Less than significant
	RISK-6: Proposed Project-related terminal modifications would not result in a measurable increase in the probability of a terrorist attack and would not result in adverse consequences to the proposed project site and nearby areas.	CEQA: Less than significant NEPA: Less than significant	No mitigation is required.	CEQA: Less than significant NEPA: Less than significant

Table 3.9-11: Summary Matrix of Potential Impacts and Mitigation Measures for Hazards and Hazardous Materials Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Alternative 1 – No Project	RISK-1: Alternative 1 would not substantially increase the probable frequency and severity of consequences to people or property as a result of accidental release or explosion of a hazardous substance.	CEQA: Construction: No impact Operation: Less than significant NEPA: Not Applicable	No mitigation is required. Mitigation not applicable	CEQA: No impact NEPA: Not Applicable
	RISK-2: Alternative 1 would not substantially increase the probable frequency and severity of consequences to people from exposure to health hazards.	CEQA: Construction: No impact Operation: Less than significant NEPA: Not Applicable	No mitigation is required. Mitigation not applicable	CEQA: No impact NEPA: Not Applicable
	RISK-3: Alternative 1 would not substantially interfere with an existing emergency response or evacuation plan, thereby increasing the risk of injury or death.	CEQA: Construction: No impact Operation: Less than significant NEPA: Not Applicable	No mitigation is required. Mitigation not applicable	CEQA: No impact NEPA: Not Applicable
	RISK-4: Alternative 1 would comply with applicable regulations and policies guiding development within the Port.	CEQA: Construction: No impact Operation: Less than significant NEPA: Not Applicable	No mitigation is required. Mitigation not applicable	CEQA: No impact NEPA: Not Applicable
	RISK-5: Tsunami-induced flooding and seismic events could result in fuel releases from construction equipment or hazardous substances releases from containers under Alternative 1, which in turn could result in risks to persons and/or the environment.	CEQA: Construction: No impact Operation: Less than significant NEPA: Not Applicable	No mitigation is required. Mitigation not applicable	CEQA: No impact NEPA: Not Applicable
	RISK-6: Alternative 1–related terminal modifications would not result in a measurable increase in the probability of a terrorist attack and would not result in adverse consequences to the proposed project site and nearby areas.	CEQA: Construction: No impact Operation: Less than significant NEPA: Not applicable	No mitigation is required. Mitigation not applicable	CEQA: No impact NEPA: Not applicable

Table 3.9-11: Summary Matrix of Potential Impacts and Mitigation Measures for Hazards and Hazardous Materials Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Alternative 2 – No Federal Action	RISK-1: Alternative 2 would not substantially increase the probable frequency and severity of consequences to people or property as a result of accidental release or explosion of a hazardous substance.	CEQA: Less than significant NEPA: No impact	No mitigation is required.	CEQA: Less than significant NEPA: No impact
	RISK-2: Alternative 2 would not substantially increase the probable frequency and severity of consequences to people from exposure to health hazards.	CEQA: Less than significant NEPA: No impact	No mitigation is required.	CEQA: Less than significant NEPA: No impact
	RISK-3: Alternative 2 would not substantially interfere with an existing emergency response or evacuation plan, thereby increasing the risk of injury or death.	CEQA: Less than significant NEPA: No impact	No mitigation is required.	CEQA: Less than significant NEPA: No impact
	RISK-4: Alternative 2 would comply with applicable regulations and policies guiding development within the Port.	CEQA: Less than significant NEPA: No impact	No mitigation is required.	CEQA: Less than significant NEPA: No impact
	RISK-5: Tsunami-induced flooding and seismic events could result in fuel releases from construction equipment or hazardous substances releases from containers under Alternative 2, which in turn could result in risks to persons and/or the environment.	CEQA: Less than significant NEPA: No impact	No mitigation is required.	CEQA: Less than significant NEPA: No impact
	RISK-6: Alternative 2–related terminal modifications would not result in a measurable increase in the probability of a terrorist attack and would not result in adverse consequences to the proposed project site and nearby areas.	CEQA: Less than significant NEPA: No impact	No mitigation is required.	CEQA: Less than significant NEPA: No impact

Table 3.9-11: Summary Matrix of Potential Impacts and Mitigation Measures for Hazards and Hazardous Materials Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Alternative 3 – Reduced Project: Improve Berths 217–220 Only	RISK-1: Alternative 3 would not substantially increase the probable frequency and severity of consequences to people or property as a result of accidental release or explosion of a hazardous substance.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant		NEPA: Less than significant
	RISK-2: Alternative 3 would not substantially increase the probable frequency and severity of consequences to people from exposure to health hazards.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant		NEPA: Less than significant
	RISK-3: Alternative 3 would not substantially interfere with an existing emergency response or evacuation plan, thereby increasing the risk of injury or death.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant		NEPA: Less than significant
RISK-4: Alternative 3 would comply with applicable regulations and policies guiding development within the Port.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant	
	NEPA: Less than significant		NEPA: Less than significant	
RISK-5: Tsunami-induced flooding and seismic events could result in fuel releases from construction equipment or hazardous substances releases from containers under Alternative 3, which in turn could result in risks to persons and/or the environment.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant	
	NEPA: Less than significant		NEPA: Less than significant	
RISK-6: Alternative 3–related terminal modifications would not result in a measurable increase in the probability of a terrorist attack and would not result in adverse consequences to the proposed project site and nearby areas.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant	
	NEPA: Less than significant		NEPA: Less than significant	

Note: Except where specified, the Impact Determination is applicable for both construction and operation impacts.

1 **3.9.4.5 Mitigation Monitoring**

2 Neither the proposed Project nor any of the alternatives would result in significant
3 impacts on Hazards and Hazardous Materials. Therefore, no mitigation measures or a
4 monitoring program are required.

5 **3.9.5 Significant Unavoidable Impacts**

6 No significant unavoidable impacts or risks related to Hazards and Hazardous Materials
7 would occur as a result of construction or operation of the proposed Project or
8 alternatives.

9