3.13

UTILITIES AND PUBLIC SERVICES

3.13.1 Introduction

This chapter addresses construction and operation impacts of the proposed Project and its alternatives on utilities and service systems (water, wastewater, storm drainage, solid waste, electrical, and natural gas) as well as public services (fire protection, emergency response, law enforcement services, and other public facilities). For each of the utilities and energy systems included in this section, existing infrastructure and levels of service are described, in addition to possible improvements that would be required to accommodate the proposed Project. Fire and police access, response times, available equipment, and station locations are also addressed.

3.13.1.1 Relationship to 1992 Deep Draft EIS/EIR

The 1992 Deep Draft Final Environmental Impact Statement/Environmental Impact Report (FEIS/FEIR) discussion of utilities and public services is comprised of three sections that include Energy, Public and System Safety (inclusive of fire protection and risk of upset), and Utilities. These three sections were evaluated at a project-specific level and at a general programmatic level.

The project-specific level recommended mitigation, to the extent feasible, for all significant impacts to public and system safety, utilities, and energy systems that would result from navigation and landfill improvements required to create Pier 400, including portions of the current proposed Project that are located on Pier 400.

The Deep Draft FEIS/FEIR also evaluated at a general, or programmatic, level. The general evaluation projected impacts of development and operation of terminal facilities planned for location on Pier 400. These impacts include the development of a marine oil terminal as well as impacts from the development and use of the marine terminal's associated infrastructure.

The Deep Draft FEIS/FEIR identified the utility impacts of terminal development and operation in relationship to 1) water supply; 2) wastewater treatment; 3) solid waste; 4) storm drain systems; 5) telecommunications; and 6) pipelines.

The Deep Draft FEIS/FEIR concluded that no significant energy system impacts would result from the creation of Pier 400 and associated facilities, and therefore no energy mitigation measures were provided. Similarly, discussion of impacts on public services was not carried forward for detailed analysis in the Deep Draft FEIS/FEIR since the Initial Study for that project determined that no significant impacts would occur.

The Public and System Safety section stated that the isolated location of the proposed Pier 400 would result in a reduction in response time of safety services and mitigation measures were provided to reduce the impact to a level below significance. The Deep Draft FEIS/FEIR indicated that **Mitigation Measure (MM) 4I-4** (which required facilities on the landfill to have built-in fire protection measures), **MM 4I-5** (which required that the landfill be able to use seawater for fire protection), **MM 4I-6** (which required continued implementation of the Fire Protection Master Plan), and **MM 4I-7** (which required adequate Port Police security coverage) would be applicable to reduce significant impacts on public safety. The applicability of these mitigation measures for the proposed Project is analyzed in Section 3.12, Risk of Upset/Hazardous Materials.

Demands on utilities were expected to increase, but it was concluded that the supplemental infrastructure would be able to accommodate the increase in demand without adversely affecting existing utility systems for wastewater treatment, solid waste disposal, storm drains, telecommunications, and pipelines. A potential significant impact was identified regarding water supply; in response, a mitigation measure was included to be implemented as part of the project. This mitigation measure, as described below, would result in more efficient use of the water supply, thereby reducing the impact on water supply to an insignificant level.

Mitigation Measures from the 1992 Deep Draft Final EIS/EIR that are Applicable to the Proposed Project

The approved Deep Draft FEIS/FEIR incorporated **MM 4N-1** as described below. This mitigation measure is applicable and must be implemented by the proposed Project. New measures developed specific to the proposed Project in this Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR) must also be implemented. Mitigation measures from the Deep Draft FEIS/FEIR and new project-specific mitigation measures developed as part of this Draft SEIS/SEIR would be enforced by inclusion in the proposed Project Mitigation Monitoring and Reporting Plan (MMRP).

MM 4N-1 stated that water conservation devices and systems would be incorporated into project designs, including those required by the State of California Department of Water Resources. These included the following:

- Any landscape plans shall emphasize a planting scheme that minimizes water irrigation requirements and shall use drought-resistant, native vegetation.
- The proposed Project shall pursue the use of reclaimed water from the Terminal Island Treatment Plant for use in terminal operations.
- The use of seawater for fire suppression shall be investigated.

3.13.2 Environmental Setting

3.13.2.1 Public Services

3.13.2.1.1 Fire Protection

Fire prevention, fire protection, and emergency medical services within the City of Los Angeles are operated under the Fire Protection and Prevention Plan (FPPP), an element of the City of Los Angeles General Plan, and the Fire Code section of the Los Angeles Municipal Code. The FPPP serves as a guide for the construction, maintenance, and operation of fire protection facilities in the City of Los Angeles. The Plan sets forth policies and standards for fire station distribution and location, fire suppression water flow (fire flow), fire hydrant standards and locations, firefighting equipment access, emergency ambulance services, and fire prevention activities (City of Los Angeles 2001). The Los Angeles Fire Department (LAFD) considers population, density, nature of on-site land uses, and traffic flow in evaluating the adequacy of fire protection services for a specific area or land use.

Fire protection is also dependent on the required fire flow (i.e., water quantity necessary for fire protection). The amount of fire flow necessary for site-specific fire protection varies and is based on land use type, size, occupancy, type of construction, and degree of present fire hazards. Typical urban fire-flow requirements vary from 2,000 gallons per minute (gpm) in low-density residential areas to 12,000 gpm in high-density commercial and industrial areas. Required fire flow is defined as the rate of water flow, measured in gpm and duration, needed for firefighters to contain a major fire to the buildings within the surrounding block (City of Los Angeles 2001). City of Los Angeles Fire Code standards require that a minimum residual water pressure of 20 pounds per square inch (psi) remain in the water system in excess of the required fire flow. The total required flow rate for the proposed Project facility is between 6,000 and 9,000 gpm per City of Los Angeles fire code and NFPA (Spec Services 2005). The LAFD assigns fire protection standards and response times for both engine and truck companies.

The LAFD provides fire protection and emergency services to the proposed Project area and the entire Port of Los Angeles (Port). The proposed Project site is located within the Harbor Industrial Division service district. The LAFD facilities include numerous land-based fire stations and fireboat companies located in the proposed Project vicinity. The citywide average response time for fire and emergency medical service (EMS) is approximately 8 to 10 minutes (City of Los Angeles 2001).

The first responder to the Pier 400 portion of the proposed Project site would be Station 111, Battalion 6, located approximately 0.75 mile (1.2 kilometer [km]) to the northwest, at 1444 Seaside Avenue, at Berth 256. Station 111 is a boathouse with a staff of three per shift that primarily serves Fish Harbor and the Main Channel areas. Response time from Station 111 to Pier 400 would range from 4 to 15 minutes depending on several factors including the state of seas, wake, boat traffic, and distance to the fire (personal communication, M. Pesich, 2006). Station 112 houses the larger Fireboat #2, which would also assist in the case of a fire at Pier 400. Response time from Station 112 to Pier 400 would be approximately 15 minutes because the large size of the boat requires it to travel slower so as to not create a wake in the harbor (personal communication, Captain Frasier, 2006). The closest land-based fire engine company to the proposed

Project sites is Fire Station 40, located approximately 2.0 miles (3.2 km) from Pier 400. Fire Station 40 is located at 330 Ferry Street, and contains a task force station with a truck and engine company, and paramedic ambulance. Response times from Station 40 to Pier 400 are approximately 3 to 5 minutes (personal communication, Captain Spencer, 2006). Each station would serve as a backup to the other responder in the event of an emergency within any portion of the proposed Project area (personal communication, T. Hix, 2004).

Water for domestic use and firefighting purposes may be derived from two major 36-inch water mains serving the Port provided by the Los Angeles Department of Water and Power (LADWP). These distribution mains run parallel to Gaffey Street (City of Los Angeles 1995). Additional water mains are located throughout the interior of Terminal Island and Pier 400, which serve existing fire protection needs adequately. Approximately 10 fire hydrants are located in the vicinity of the proposed Tank Farm Site 2 on Terminal Island, and numerous fire hydrants are located on Pier 400. LAFD requires accessible fire hydrants at a distance of no more than 300 ft (91 m) from each other in heavy industrial areas, such as the proposed Tank Farm Site 1 on Pier 400. Current fire flow is adequate in the proposed Project area and nearby Port facilities (personal communication, M. Kleckner, 2004).

3.13.2.1.2 Police Protection

Police protection services to the Port are provided by the Los Angeles Police Department (LAPD) and the Los Angeles Harbor Department Police (Port Police). The proposed Project site is located in the LAPD's Harbor Division Area, which includes a 27.5 square-mile (71.2 square-km) area including Harbor City, Harbor Gateway, San Pedro, Wilmington, and Terminal Island.

The Port Police is the first response agency in the Port and is responsible for operations within the Port property boundaries. Headquarters for the Port Police are located in the Harbor Administration Building at 425 South Palos Verdes Street, San Pedro. Designs for a new Port Police facility are underway that will be equipped with the latest in surveillance, command and control, and interoperable communications technologies. The new facility will be directly linked with the Long Beach Harbor Patrol command center. Since September 11, 2001, the number of Port Police officers has increased by 30 percent. The Port Police is authorized to maintain a staff of 88 sworn officers who enforce municipal, state, and federal laws, as well as the Port tariff regulations. The department maintains 24-hour land and water patrols with a fleet of 24 vehicles, 6 police boats, and a single zodiac (rubber boat with a motor) used to transport police divers. A service ratio of 0.72 officers per square mile of developed Port land is used by the Port Police to determine the number of officers required to provide adequate police protection services to a given area (personal communication, C. Provinchain, 2007). Port Police currently patrol the proposed Project site and vicinity, and response time to any portion of the proposed Project site is estimated between 2 and 3 minutes (personal communication, K. Hawks, 2004). The Port Police received an $800,000 federal grant to purchase two new patrol boats, substantially enhancing patrol and response capabilities.

Although the Port Police provide first response to an emergency, the Port is located within the City of Los Angeles; and the LAPD has primary responsibility for police

services. The LAPD provides support to the Port Police and response to Port incidents under the following special circumstances: 1) complex crimes including homicides and major traffic incidents, 2) special investigations including narcotics, organized crime, and terrorism, and 3) unusual occurrences as identified by the City protocol, such as events that require special resources, expertise, or staffing beyond current competencies (personal communication, C. Provinchain, 2007). The LAPD Harbor Division is located at 221 N. Bayview, San Pedro. The Harbor Division has a staff of approximately 80 officers per day (16 to 24 officers per shift, 4 shifts per day). This station is responsible for patrols throughout San Pedro, Harbor City, and Wilmington. The department maintains a fleet of radio cars and helicopters. Response time from the station to Pier 400 in an emergency situation would be approximately 2 minutes (personal communication, Officer Flores, 2006). South Bureau divisions include the 77th Street Area, Southeast Division, and the Southwest Division. The standard response time for emergencies is approximately 7.5 to 9 minutes, and for non-emergencies is 30 minutes. Officers also are available from other divisions within the City of Los Angeles, the Los Angeles County Sheriff's Department, and the Long Beach Police Department.

In addition to City and Port Police protection, each tenant occupying a berth or berths in the Port maintains its own internal security staff.

3.12.2.1.3 U.S. Coast Guard

The primary responsibility of the U.S. Coast Guard (USCG) is to ensure the safety of vessel traffic in the channels of the Port and in coastal waters. The USCG maintains a facility on Reservation Point, approximately 0.75 miles (1.2 km) northwest of the proposed Pier 400 Marine Terminal. The 11th USCG District provides USCG support to the Port, including the proposed Project area, and to the Port of Long Beach. The USCG in cooperation with the Marine Exchange also operates the Vessel Traffic Service (VTS). This voluntary service is intended to enhance vessel safety in the main approaches to the Port. Please see Section 3.9 (Marine Transportation) for additional information. The USCG determines emergency response time based on the distance that the USCG must travel to reach a given facility. An increase in vessel calls does not necessarily correlate to an increase in response times (personal communication, P. Gooding, 2007) because adequate staffing levels will be maintained and although the vessel calls will increase annually, daily calls are expected to remain the same.

3.13.2.2 Utilities

3.13.2.2.1 Water Services

Water service is provided to the proposed Project area by the LADWP. The LADWP is responsible for supplying, conserving, treating, and distributing water for domestic, industrial, agricultural, and firefighting purposes within the City of Los Angeles. Water sources utilized by the LADWP consist of local sources, such as wells and recycled water (for non-potable uses), and imported sources, including the Los Angeles Aqueducts and purchases from the Metropolitan Water District of Southern California (MWD). Water supply and conveyance structures comprise a series of reservoirs and a network of pipelines, including reservoir outlets, major trunk lines, and other delivery lines.

The City of Los Angeles has an Urban Water Management Plan (UWMP) prepared by LADWP that was adopted in 2005 and is updated every 5 years, as required by the California Water Code (Section 10621a). The LADWP UWMP is designed to serve as the City master plan for water supply and resources management. This plan provides the basic policy principles that will guide the LADWP decision making process to secure an adequate sustainable water supply for the entire City of Los Angeles area of 464 square miles, including the Port of Los Angeles. The LADWP Urban Water Management Plan uses a service area-wide method in developing City water demand projections. This methodology does not rely on individual development demands to determine areawide growth. Rather, the growth in water use for the entire service area was considered in developing long-term water projections for the City of Los Angeles to 2030, including water use by Port tenants. The driving factors for this growth are demographics, weather, and conservation. LADWP used anticipated growth in the various customer class sectors as provided by SCAG. The data used were based on the 2003 Regional Transportation Plan Forecast by SCAG (LADWP 2005). The UWMP provides water resources and supply planning through the year 2030. The LADWP UWMP is available at the Los Angeles Harbor Department (LAHD), Environmental Management Division, 425 South Palos Verdes Street, San Pedro CA and at http://www.ladwp.com/ladwp/cms/ladwp007157.pdf (LADWP 2005).

To provide a reliable water supply, LADWP has invested in groundwater, recycled water, and water conservation. Specific supply and demand-side management strategies are designed to provide a "hedge" against droughts and variability of surface water. Calculations in the UWMP are based on assumptions regarding the various supplies of water available (including water from the Los Angeles Aqueduct, groundwater, water purchased from MWD, and recycled water) and existing and projected levels of water conservation. Based on these calculations, LADWP predicts service reliability for average and single dry year conditions. Total demand for water is predicted to be 755,000 acre feet in 2025 and 776,000 in 2030. LADWP forecasts include anticipated demand from the Port of Los Angeles, including the proposed Project. LADWP expects it will be able to meet this demand with a combination of existing supplies, planned supplies, and MWD purchases (existing and planned) (LADWP 2005).

The 2005 MWD UWMP is also incorporated by reference and is available at LAHD Environmental Management Division, 425 South Palos Verdes Street, San Pedro CA and at http://www.mwdh20.com/. As discussed above, the 2005 LADWP UWMP relies, in part, on water supply purchases from MWD. Section A.1 of the 2005 MWD UWMP explains the methodology for forecasting demand from the full spectrum of urban water users within the six-county MWD that includes the City of Los Angeles, including residential, commercial, industrial, institutional, and unmetered users. Section A.3 of the 2005 MWD UWMP provides justifications for its supply projections including existing supplies, historical supplies, and contracts for future supplies.

The LADWP requires consultation with applicants whose projects would be completed after 2015 by means of a Service Advisory Request (SAR) in order to assess whether the current infrastructure would be able to accommodate the increased water demand based on fire flow requirements. If the SAR determines that current infrastructure would not, the LADWP requires that additional infrastructure (i.e., water line) be constructed at the applicant's expense (personal communication, J. Porras, 2007).

The LADWP utilizes existing distribution mains located throughout the proposed Project area. The major water mains near the proposed Project site run parallel to Gaffey Street: one in San Pedro, running approximately 4,400 ft (1,340 m), and the other in the Wilmington Community, running approximately 6,800 ft (2,070 m) in length (City of Los Angeles 1995). Water mains serving Tank Farm Sites 1 and 2 include 8- and 12-inch lines. A 30-inch water line parallels Navy Way to provide newly installed water services to Pier 400 (personal communication, M. Kleckner, 2004).

Water hydrants in the proposed Project area include double 4-inch hydrants, single 2.5-inch hydrants, and double 4-inch plus 2.5-inch hydrants. Existing on-site water systems may need to be altered to accommodate additional needs imposed by the proposed Project.

3.13.2.2.2 Wastewater

Sewer service to the proposed Project area is provided by the City of Los Angeles Department of Public Works, Bureau of Sanitation. The Bureau of Sanitation maintains both sewer lines throughout the proposed Project area and a nearby wastewater treatment facility. The Terminal Island Treatment Plant (TITP) is located at 455 Ferry Street. The TITP can treat up to 30 million gallons per day (mgd); TITP presently operates at less than 50 percent of capacity, treating approximately 15 mgd. In order to determine the amount of wastewater that will be produced by an industrial project, the TITP maintains a generation factor of 150 gallons per day per person (personal communication, D. Gumaer, 2007). The plant treats all wastewater flows received to third stage tertiary treatment levels, discharging treated effluent into the harbor in the vicinity of Pier 400. Some wastewater is further treated for reuse within the Port (e.g., for irrigation and industrial water supplies) (personal communication, D. Gumaer, 2004).

3.13.2.2.3 Storm Drainage

Storm drains are located throughout the proposed Project area and maintained by the LAHD, City of Los Angeles, and Los Angeles County. Pier 400 has approximately 22,000 linear ft (6,700 m) of reinforced concrete storm drains to collect stormwater. There are five storm drain outfalls into the harbor, including a 6.5 ft x 5.5 ft (2.0 m x 1.7 m) reinforced concrete box at Face C. Storm drainage on Terminal Island consists of surface runoff catch basins along Seaside Avenue near Navy Way and a 96-inch outfall line. This system collects the water and discharges it in the East Basin Channel. An additional system runs parallel to Ferry Street near Seaside Avenue and consists of a 78-inch outfall line. This outfall also terminates at the East Basin Channel. Other storm drain systems include a 78-inch line along Earle Street and the 48-inch Terminal island storm drain (USACE and LAHD 1992). All of the storm drain system in the proposed Project area is maintained by the LAHD, City of Los Angeles, and Los Angeles County. In addition, tenants will be expected to maintain and implement a storm water pollution prevention plan (SWPPP) in order to ensure that pollution to storm drain systems are minimized.

3.13.2.2.4 Solid Waste

Solid waste generated at the proposed Project site consists generally of non-hazardous materials, such as food and beverage containers, paper products, and other miscellaneous

personal trash disposed of by onsite staff. Solid waste generated by existing operations complies with federal, state, and local regulations and codes pertaining to solid waste disposal. Codes include Chapter VI Article 6 Garbage, Refuse Collection of the City of Los Angeles Municipal Code, Part 13 Title 42-Public Health and Welfare of the California Health and Safety Code, and Chapter 39 U.S. Solid Waste Disposal Code. The terminal complies with the California Solid Waste Management Act (Assembly Bill [AB] 939), mandating every city in the state to divert at least fifty percent of solid waste from landfill disposal through source reduction, recycling, and composting. The City of Los Angeles has met and exceeded the AB 939 requirement, with a 62 percent solid waste diversion in 2005 (Tseng, 2007). A 70 percent diversion rate is California's new goal for the year 2020 (California Integrated Waste Management Board 2006). In 2003, the Port's diversion rate was 41.8 percent, or 1,998.2 tons (LAHD 2005). Most construction/demolition debris will be crushed for reuse construction purposes within the Port; however, construction/demolition activities still result in a substantial one-time contribution to the solid waste stream. The following programs are implemented by the Port to assist in waste diversion (LAHD 2005):

- Duplex Printing and Photocopying
- Wood Waste Diversion Program
- Green Waste Recycling Program.
- Administrative Office Recycling Program.
- Toner Cartridge Recycling
- Ferrous Metals Recovery Program
- Inerts Recycling Program
- Motor Oil Recycling Program
- Tire Recycling Program
- Office Paper
- Cardboard Recycling Program
- Scrap Metal
- Beverage Container Recycling
- Fish Sludge Recovery
- Wood Waste Collection Program
- Non-food Donation
- Office Furniture Source Reduction

The Port tenants usually contract with private waste haulers for solid waste disposal. The City of Los Angeles Bureau of Sanitation, in general, and Browning Ferris Industries (BFI) (a private waste management service) provide solid waste collection and disposal services at the proposed Project site. Los Angeles County Ordinance 7A prohibits solid waste from the City of Los Angeles from being handled by or disposed of in facilities and landfills operated by the Los Angeles County Sanitation District.

Currently, nonhazardous solid waste generated would be disposed of at the Chiquita Canyon Landfill or Sunshine Canyon Landfill, depending on daily capacities and hours of operation. Chiquita Canyon Landfill, owned by Republic Services, Inc., located at 29201 Henry Mayo Drive in Valencia, has a daily capacity of up to 5,000 tons. Sunshine Canyon Landfill is located at 14747 San Fernando Road in Sylmar. Sunshine Canyon Landfill is owned by BFI and has an average capacity of 12,100 tons per day, with 5,500 tons per day allotted for City use. As of July 2007, Chiquita Canyon Landfill is projected to close by 2025, and Sunshine Canyon Landfill is projected to close by 2029 (Sanitation Districts of Los Angeles County, 2007). Solid waste generated by the Port of Los Angeles facilities and transported to Sunshine Canyon Landfill is determined using a generation factor of 0.372 ton per year per acre of Port land (LAHD 2005). In addition to the Chiquita Canyon Landfill and the Sunshine Canyon Landfill, the City of Los Angeles diverts 600 tons per day of solid waste to the El Sobrante Landfill in Riverside County. El Sobrante Landfill has a maximum daily permitted capacity of 10,000 tons per day, and its projected closure date is 2030 (Sanitation Districts of Los Angeles County, 2007). Approximately 4,000 tons per day of capacity is reserved for refuse generated in Riverside County (City of Lake Elsinore, 2006).

Hazardous materials, such as contaminated soils and petroleum byproducts, that may be encountered during construction are first tested first tested to characterize the nature and extent of contamination. Based on the characterization, treatment and disposal options are developed. In general, treatment options are considered before disposal because treatment can be less expensive and because long-term liability can be avoided by rendering contaminated soil inert. Treatment of petroleum-contaminated soils can include thermal desorption. Other processes include stabilization or fixation.

Based on the characterization, if disposal is required, wastes would be taken to an appropriate disposal facility or landfill, including Class I landfills. There are numerous contaminated waste treatment facilities in California, including TPS Technologies in Adelanto and TRS in Azusa. The closest Class I hazardous waste landfill is the Buttonwillow Landfill, located in Kern County, approximately 8 miles west of Buttonwillow and 36 miles west of Bakersfield. In addition, the Class I Kettleman Hills facility is located further to the north in Kings County and has a remaining capacity of 1,901,860 cubic yards, with no daily limit (CIWMB, 2007). Several other hazardous waste disposal sites are located in California and neighboring states. For asbestos-containing wastes, disposal facilities include Azusa Land Reclamation Company, Toland Road Sanitary landfill, and the Simi Valley Landfill and Recycling Center.

3.13.2.2.5 Energy (Electricity and Natural Gas)

The LADWP provides electrical services within the Port and the proposed Project area. The LADWP maintains the Harbor Generating Station at the intersection of Island Avenue and Harry Bridges Boulevard, near the Port. Numerous above- and below-ground electrical transmission lines are in the proposed Project area. There are two distribution lines that would serve the proposed Project area: a 4.8 and a 34.5 kilo-Volt (kV) distribution lines (Jones & Stokes 2002). These facilities provide sufficient electricity to meet current demands (personal communication, V. Haddadian, 2004).

The Port, and the rest of the City of Los Angeles, receives its electricity from a network of power stations and other sources operated by the LADWP. The industrial power

station closest to the Port has four main 138-kV supply lines, two from the Harbor steam plant, and two from North Wilmington. A 34.5-kV line connects with the steam plant generator, and underwater circuits from San Pedro (a 4.8-kV line) and Wilmington (a 34.5-kV line) cross to Terminal Island. Several other electrical power cables are distributed throughout the Harbor area.

Both Long Beach Energy (LBE) and the Southern California Gas Company (SCGC) provide natural gas services to the proposed Project area. LBE and the Port recently installed a new gas line to serve Pier 400. A 4-inch gas line ties into the LBE network south of the intersection of Navy Way and Reeves Avenue, and runs south along Navy Way to Pier 400. This line follows the contour of Pier 400, ending at a meter station north of the least tern nesting area.

The proposed Tank Farm Site 2 at the intersection of Navy Way and Seaside Avenue would be served by SCGC. The nearest SCGC service facility, a 10-inch line, runs parallel to and on the north side of Dock Street, which is approximately 900 ft north of Seaside Avenue. There are no SCGC lines serving the intersection of Seaside Avenue and Navy Way (personal communication, P. Rongavilla, 2004).

3.13.3 Applicable Regulations

The Port is directed by internal standards and policies that guide the provision of service to its customers. Each agency charged with protecting the public (LAFD, LAPD, Port Police, and USCG) maintains specific standards, such as response times and levels of service that must be adhered to during construction and operation of a project. Each public utility agency and private utility provider, including the LADWP, SCGC, the City of Los Angeles Department of Public Works Bureau of Sanitation, and Consolidated Disposal Services, are directed by internal standards and policies that guide the provision of service to their customers. Specific to the LADWP and SCGC, the CEC regulates the provision of natural gas and electricity within the state.

3.13.3.1 The Maritime Transportation Security Act

The Maritime Transportation Security Act (MTSA) and its international equivalent, the ISPS Code (adopted by the International Marine Organization [IMO]), require port authorities and facility operators to designate and train company, vessel, and facility security officers and develop security plans for facilities and vessels based on security assessments and surveys. MTSA regulations also guide implementation of security measures specific to the operations of each facility and compliance with maritime security levels. Regulations regarding the submittal of security plans became effective December 31, 2003; operational compliance were mandated by July 1, 2004.

3.13.3.2 California Urban Water Management Act

The California Urban Water Management Planning Act requires urban water suppliers to initiate planning strategies that make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry-water years. The LADWP would be the water supplier, and as such the proposed Project would be under the jurisdiction of the

LADWP UWMP, prepared pursuant to the California Urban Water Management Planning Act.

3.13.3.3 California Solid Waste Reuse and Recycling Access Act

The California Solid Waste Reuse and Recycling Access Act of 1991 required each jurisdiction to adopt an ordinance by September 1, 1994, requiring any "development project" for which an application for a building permit is submitted to provide an adequate storage area for collection and removal of recyclable materials. AB 1327 regulations govern the transfer, receipt, storage, and loading of recyclable materials at the Port.

3.13.3.4 AB939: California Integrated Waste Management Act

AB939 was designed to focus on source reduction, recycling and composting, and environmentally safe landfilling and transformation activities. This act required cities and counties to divert 25 percent of all solid waste from landfills and transformation facilities by 1995, and 50 percent by year 2000. The City of Los Angeles met and exceeded the year 2000 goals; in 2005, the City's diversion rate was 62 percent (Tseng, 2007). In 2003, the Port's diversion rate was 41.8 percent (LAHD 2005).

3.13.3.5 California's Building Code CCR, Title 24, Part 6

Title 24, Part 6 of the California Building Code describes California's energy efficiently standards for residential and nonresidential buildings, These standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption and have been updated periodically to include new energy efficiency technologies and methods. Title 24 requires building according to energy efficient standards for all new construction, including new buildings, additions, alternations, and, in non-residential buildings, repairs.

3.13.3.6 City of Los Angeles Plans and Directives

3.13.3.6.1 Solid Waste Plans

The City of Los Angeles has initiated the Recovering Energy, Natural Resources, and Economic Benefit from Waste for Los Angeles Plan (RENEW LA) as a guide for solid waste and resource management in the future. The RENEW LA Plan is a comprehensive plan for the recovery and beneficial use of materials currently being disposed of in landfills. The key goal of the RENEW LA Plan is creation of a new system of resource management based on the concept of "Zero Waste." The goal of zero waste as defined in the Plan is to reduce, reuse, recycle, or convert the resources now going to disposal to achieve an overall diversion level of 90 percent or more by 2025 and to leave for disposal only a small amount of inert residual material (City of Los Angeles, 2005). The Plan not only puts forth the vision of where the City of Los Angeles wants to be in 2025 but also provides a guiding "blueprint" of how to get there. The blueprint highlights milestones, facility development, and key actions to be accomplished during four 5-year time periods: 2005, 2010, 2010 to 2015, 2015 to 2020, and 2020 to 2025. Actions will be required in technology and programs, policy, and education.

Building on the RENEW LA Plan, the City of Los Angeles is developing the Solid Waste Integrated Resources Plan (SWIRP), which will serve as the 20-year master plan for City solid waste and recycling programs. The SWIRP will outline City objectives to provide sustainability, resource conservation, source reduction, recycling, renewable energy, maximum material recovery, and public health and environmental protection for solid waste management planning through 2025—leading Los Angeles toward being a "zero waste" city. Achieving zero waste will require radical changes in three areas: product creation (manufacturing and packaging), product use (use of sustainable and recyclable products), and product disposal (resource recovery or landfilling). Changes in these areas will affect how we live, work, and interact with the environment. Stakeholders will be instrumental in guiding this visionary 20-year solid waste management plan. This plan will seek input from stakeholders representing a broad section of the community, from diverse cultural backgrounds and income levels, and will result in the development and implementation of a 20-year master plan for the City's solid waste and recycling programs.

3.13.3.6.2 LADWP Urban Water Management Plan

Consistent with the California Urban Water Management Planning Act, LADWP has prepared the UWMP to describe how water resources are used and to present strategies that will be used to meet the current and future water needs of the City. To meet the objectives of the California Urban Water Management Planning Act, the LADWP UWMP focuses primarily on reliability of the water supply and efficiency measures for water use.

The California Urban Water Management Planning Act requires water suppliers to develop water management plans every 5 years. LADWP most recently completed this 5-year update in 2005. This plan, the *2005 Urban Water Management Plan*, was completed as an update to the previous 2000 UWMP to comply with the Urban Water Management Planning Act. LADWP also published annual fiscal year updates in the 2005 UWMP. The plan projects water demand and supplies through 2030. Total LADWP demand for water is predicted to be 755,000 acre-feet in 2025 and 776,000 in 2030. LADWP forecasts include anticipated demand from the Port of Los Angeles, including the proposed Project. LADWP expects to be able meet this demand with a combination of existing supplies, planned supplies, and MWD purchases (existing and planned) (LADWP, 2005).

3.13.3.6.3 LADWP Integrated Resources Plan

The LADWP prepared an Integrated Resources Plan (IRP) in 2000 and 2006 to provide a framework to assure that future energy needs of LADWP customers are reliably met at the least cost and are consistent with the City commitment to environmental excellence (City of Los Angeles 2006b). Under the Los Angeles City Charter (Sections 220 and 673), LADWP has the power and duty to construct, operate, maintain, extend, manage, and control water and electric works and property for the benefit of the City and its habitats. As a consequence, LADWP is charged with maintaining sufficient capability to provide its customers with a reliable supply of power.

In 2002, Senate Bill (SB) 1078 implemented a Renewable Portfolio Standard, which established a goal that 20 percent of the energy sold to customers be generated by

renewable resources by 2017. The IRP provides objectives and recommendations to reliably supply LADWP customers with power and to meet the 20 percent renewable energy goal by 2010.

As of the 2006 IRP, LADWP prepared a Load Forecast that predicts that LADWP customers' electricity consumption will increase at an average rate of 1.1 percent per year, and that peak demand will increase an average of 70 megawatts per year for the foreseeable future. For 2025, LADWP predicts that peak demand will reach 7,370 megawatts and that total resources will amount to 8,516 megawatts (including a reserve margin).

3.13.3.6.4 Wastewater Facilities Plan

The City prepares a wastewater facilities plan approximately every 10 years or so in order to review the existing wastewater treatment system, project future wastewater service demands, and identify various facility improvements to meet future demands. Future wastewater demand projections are based, in part, on SCAG population projections.

The Los Angeles Bureau of Sanitation with LADWP recently prepared the IRP for the wastewater program. Flows generated in the Port of Los Angeles are conveyed to the Terminal Island Treatment Plant. The IRP projects that by the Year 2020, wastewater flows within the TITP service area will grow to 19.9 million gallons per day from its current flows of approximately 17 million gallons per day (City of Los Angeles 2006b). With the capacity of the TITP at 30 million gallons per day, approximately 10 mgd in daily capacity at TITP would remain unused by 2020. The projected wastewater flow level increase from 16.2 mgd to 19.9 mgd over a 14-year period (2006 to 2020) is equivalent to an annual increase in wastewater generation in the Terminal Island Service Area of approximately 0.264 mgd. Applying this growth percentage to project future flows in the Service Area beyond the 2020 planning horizon in the IRP shows that, in 2045, Service Area wastewater flows could reach 26.5 mgd, which is below TITP capacity.

3.13.4 Impacts and Mitigations

3.13.4.1 Methodology

Public Services

The proposed Project and alternatives were evaluated to determine if police, USCG, and fire protection facilities were adequately staffed and located so they could respond to an emergency situation in a timely manner, without the provision of additional physical facilities. All agencies were contacted to obtain information regarding their existing and projected service capacity, as well as the projected impacts that would result from implementation of the proposed Project. Wherever possible (i.e., for agencies that provided a demand factor or service ratio), quantifications were included to demonstrate specific demands. Modeling of the activity of the proposed Project site shows that crude oil capacity would be maximized at year 2025 and would not increase from year 2025 to

2040 (Table 2-1). Therefore, 2025 proposed Project data is used for the analysis of operational utility demands in the Draft SEIS/SEIR.

The Port Police maintains a service ratio of 0.72 officers required per square mile. The Port Police officer demands under baseline, proposed Project, and alternatives conditions were determined using this service ratio and the applicable developed site acreages, as shown below in Table 3.13-1.

Table 3.13-1. Port Police Demand

	CEQA Baseline	*NEPA Baseline*	*Proposed Project*	*No Federal Action/ No Project*	*Reduced Project*
Area (acre)[1]	0	10.7	52.7	10.7	52.7
Conversion (sq mi/acre)	0.0015625	0.0015625	0.0015625	0.0015625	0.0015625
Area (sq mi)	0	0.017	0.093	0.017	0.093
Service Ratio (officer/sq mi)[2]	0.72	0.72	0.72	0.72	0.72
Total Officer Demand	**0**	**0.012**	**0.059**	**0.012**	**0.059**

Notes:

1. The acreage used for quantifying Port Police Demand under the Proposed Project and Reduced Project Alternative represents the sum of the marine terminal acreage (i.e., 5.0 acres) and the total tank farm acreage (i.e., 47.7 acres). The acreage used for NEPA Baseline and No Federal Action/No Project Alternative quantifications represents the total acreage of the proposed Project's Tank Farm Site 1.
2. Source*:* personal communication, C. Provinchain, 2007.

Public Utilities

Assessment of the proposed Project and alternatives impacts on utilities (water, wastewater, storm drainage, solid waste) and energy providers (electricity and natural gas) varies depending on the utility, but generally includes a comparison of the project-generated demand against existing and anticipated resource supplies and/or conveyance capacity. Quantifications of demands and generations were included based on factors provided by the applicable agencies, as shown in Tables 3.13-2 through 3.13-4.

Water supply or conveyance impacts are typically evaluated by estimating water consumption factors associated with proposed Project site land use(s) or, for nonresidential development, unit demand factors per acre or gross square foot, as established by the City of Los Angeles. Construction activities would result in a total water demand of 4,675 thousand gallons (KGal), or 14.3 acre feet for both the proposed Project and the Reduced Project Alternative (detailed calculations provided in Appendix S). The LADWP maintains operational water consumption factors of 150 gallons per day per 1,000 sf of office uses space and 80 gallons per day per 1,000 sf of industrial uses space (personal communication, F. Akhter, 2007). The office and industrial square footages were determined using the total areas of the various buildings described in Section 2.4.2. The Terminal Control Building, Administration Building, Security Building, and Tank Farm Operator Office and Control Building were included in the area designated for office uses; the Motor Control Building and Motor Control Center were included in the area designated for industrial uses. Berthing ships would also result in additional water demands in the event that an onboard distillation plant fails. In this case, the ship would require enough potable water to fill one tank, or 42,300 to 46,200 gallons. Based on the experience of the Project applicant, a conservative assumption is that one tanker per month

at most would experience distillation plant failure and require potable water while at berth. Table 3.13-2 shows the water demand and the percent of water supply this demand represents under baseline, proposed Project, and alternatives conditions.

Table 3.13-2. Water Demands

	CEQA Baseline	*NEPA Baseline*	*Proposed Project*	*No Federal Action/ No Project*	*Reduced Project*
CONSTRUCTION ACTIVITY DEMANDS					
Total Demand During Construction (acre feet) [1]	0	0	14.3	0	14.3
Total LADWP Supply (acre feet) [2,3]	**680,000**	**683,000**	**683,000**	**683,000**	**683,000**
Percent of LADWP Supply	**0**	**0**	**0.0021**	**0**	**0.0021**
OPERATIONAL DEMANDS					
Office Use Demands					
Office Uses Factor (gpd/1000 sf)[4]	150	150	150	150	150
Total Office Area (sf)	0	0	37,500	0	37,500
Office Water Demand (gpd)	*0*	*0*	*5,625*	*0*	*5,625*
Industrial Use Demands					
Industrial Uses Factor (gpd/1000 sf)[4]	80	80	80	80	80
Total Industrial Area (sf)	0	0	19,800	0	19,800
Industrial Water Demand (gal/day)	*0*	*0*	*1,584*	*0*	*1,584*
Berthing Ships Demands					
Berthing Ship Tank Fill Rate (tank fills/year)[5]	0	0	12	0	12
Tank Volume (gal/tank)[5]	46,200	46,200	46,200	46,200	46,200
Berthing Ships Demand (gal/day)	*0*	*0*	*1,518.9*	*0*	*1,518.9*
Total Water Demand (gal/day)	**0**	**0**	**8,727.9**	**0**	**8,272.9**
Conversion (gal/acre feet)	325,851.4	325,852.4	325,851.4	325,851.4	325,851.4
Total Water Demand (acre feet/year)	**0**	**0**	**9.8**	**0**	**9.8**
Total LADWP Supply (acre feet)[3,6]	680,000	755,000	755,000	755,000	755,000
Percent of LADWP Supply	**0**	**0**	**0.0013**	**0**	**0.0013**

Notes:

1. See Appendix S for detailed calculations of construction related water demands.
2. The 2010 water supply data is used for Project construction as construction activities would occur throughout 2009 and 2010.
3. Source: LADWP 2005
4. Source: personal communication, F. Akhter, 2007
5. Source: PLAMT 2007
6. The 2025 water supply data is used for Project operations as full capacity operations are reached in this year.

Table 3.13-3. Wastewater Generation

	CEQA Baseline	*NEPA Baseline*	*Proposed Project*	*No Federal Action/ No Project*	*Reduced Project*
CONSTRUCTION ACTIVITY GENERATIONS					
Total Construction Workers	0	0	90	0	90
Waste Factor (gpd/person)[1]	150	150	150	150	150
Total Waste (gpd)	0	0	13,500	0	13,500
Total Waste (mgd)	**0**	**0**	**0.01**	**0**	**0.01**
Existing Flow (mgd)[1]	16.20	16.20	16.20	16.20	16.20
Percent of Existing Flow	**0**	**0**	**0.08**	**0**	**0.08**
Daily Plant Capacity (mgd)[1]	30.00	30.00	30.00	30.00	30.00
Percent of Daily Plant Capacity	**0**	**0**	**0.05**	**0**	**0.05**
OPERATIONAL GENERATIONS					
Total Employees[2]	0	0	45	0	45
Waste Factor (gpd/person)[1]	150	150	150	150	150
Total Waste (gpd)	0	0	6,000	0	6,000
Total Waste (mgd)	**0**	**0**	**0.007**	**0**	**0.007**
Existing Flow (mgd)[1]	16.20	16.20	16.20	16.20	16.20
Percent of Existing Flow	**0**	**0**	**0.04**	**0**	**0.04**
Daily Plant Capacity (mgd)[1]	30.00	30.00	30.00	30.00	30.00
Percent of Daily Plant Capacity	**0**	**0**	**0.02**	**0**	**0.02**

Notes:

1. Source: personal communication, D. Gumaer, 2007
2. This employee number represents the employees on site at the terminal or other Project sites, such as pipeline maintenance and inspection workers.

Table 3.13-4. Solid Waste Generation

	CEQA Baseline	*NEPA Baseline*	*Proposed Project*	*No Federal Action/No Project*	*Reduced Project*
CONSTRUCTION ACTIVITY GENERATIONS					
Total Generation During Construction (tons)[1]	**0**	**5,524**	**0**	**0**	**5,524**
OPERATIONAL GENERATIONS					
24/7 Operating Staff Generations					
Total 24/7 Operating Staff	0	0	5	0	5
Shifts Per Day	0	0	3	0	3
Days Per Year	0	0	365	0	365
Generation Factor (pounds/person/day[shift])[2]	1.5	1.5	1.5	1.5	1.5
Total 24/7 Operation Staff Generations (pounds/year)	*0*	*0*	*8,212.5*	*0*	*8,212.5*

Table 3.13-4. Solid Waste Generation (continued)

	CEQA Baseline	*NEPA Baseline*	*Proposed Project*	*No Federal Action/No Project*	*Reduced Project*
OPERATIONAL GENERATIONS (CONTINUED)					
Average Terminal Staff Generations					
Total Average Terminal Staff[3]	0	0	45	0	45
Shifts Per Day	0	0	1	0	1
Days Per Year	0	0	260	0	260
Generation Factor (pounds/person/day)[2]	1.5	1.5	1.5	1.5	1.5
Total Average Terminal Staff Generations (pounds/year)	*0*	*0*	*17,550*	*0*	*17,550*
Miscellaneous Terminal Related Waste					
Generation Factor (50% of Staff Related Waste)[2]	0.5	0.5	0.5	0.5	0.5
Total Miscellaneous Waste Generations (pounds/year)	*0*	*0*	*12,881.3*	*0*	*12,881.3*
Total Solid Waste Generations (pounds/year)	**0**	**0**	**38,643.8**	**0**	**38,643.8**
Total Solid Waste Generations (tons/day)	0	0	0.053	0	0.053
Chiquita Permitted Throuhput (tons/day)	5,000	5,000	5,000	5,000	5,000
% Chiquita Permitted Capacity	**0**	**0**	**0.000010**	**0**	**0.000010**
Sunshine Permitted Capacity (tons/day)[4]	5,500	5,500	5,500	5,500	5,500
% Sunshine Permitted Capacity	**0**	**0**	**0.000011**	**0**	**0.000011**
El Sobrante Permitted Capacity (tons/day)[5]	6,000	6,000	6,000	6,000	6,000
% El Sobrante Permitted Capacity	**0**	**0**	**0.000009**	**0**	**0.000009**

Notes:

1. See Appendix S for data on construction related solid waste generations.
2. Source: PLAMT 2007
3. This employee number represents the employees on site at the terminal or other Project sites, such as pipeline maintenance and inspection workers.
4. Source: Sunshine Landfill 2006
5. Daily landfill capacity that is not allocated to Riverside County

Water supply or conveyance impacts are typically evaluated by estimating water consumption factors associated with proposed Project site land use(s) or, for nonresidential development, unit demand factors per acre or gross square foot, as established by the City of Los Angeles. Construction activities would result in a total water demand of 4,675 thousand gallons (KGal), or 14.3 acre feet for both the proposed Project and the Reduced Project Alternative (detailed calculations provided in Appendix S). The LADWP maintains operational water consumption factors of 150 gallons per day per 1,000 sf of office uses space and 80 gallons per day per 1,000 sf of industrial uses space (personal communication, F. Akhter, 2007). The office and industrial square footages were determined using the total areas of the various buildings described in Section 2.4.2. The Terminal Control Building, Administration Building, Security Building, and Tank Farm Operator Office and Control Building were included in the area designated for office uses; the Motor Control Building and Motor Control Center

were included in the area designated for industrial uses. Berthing ships would also result in additional water demands in the event that an onboard distillation plant fails. In this case, the ship would require enough potable water to fill one tank, or 42,300 to 46,200 gallons. Based on the experience of the Project applicant, a conservative assumption is that one tanker per month at most would experience distillation plant failure and require potable water while at berth. Table 3.13-2 shows the water demand and the percent of water supply this demand represents under baseline, proposed Project, and alternatives conditions.

Assessment of impacts on sewers or wastewater treatment systems generally includes the comparison of the project-related, land use-based wastewater flow generation to the existing and projected wastewater treatment capacity of the Treatment Plant. The wastewater generation factor, as provided by the TITP, is 150 gallons per day per person. Table 3.13-3 shows the total wastewater that would be generated under baseline, proposed Project, and alternatives conditions. This table also shows the percent these generations would contribute to the existing flow and to the TITP capacity.

Assessment of impacts to the storm drain system is based primarily on the determination of the contribution of the proposed Project to storm water runoff. These contributions are compared to existing conditions or the diversion and disruption of surface water flows in the event that flooding would occur.

Impacts related to solid waste generally involve the estimation of the project-related, land use-based, solid waste generation, as compared to the capacity of the landfill(s) serving the proposed Project area. Construction activities would result in a total solid waste generation of 5,524 tons for both the proposed Project and Reduced Project Alternative (see Appendix S for detailed calculations). The operational solid waste generated under baseline, proposed Project, and alternatives conditions was determined using a generation factor of 1.5 pounds of solid waste per person per day. This factor was determined by numerous studies and the experience of the Project applicant. An additional 50 percent of the employee generated waste was included to account for miscellaneous terminal related waste. The percent contribution to the permitted daily capacities of both Bradley and Sunshine Canyon Landfills was then determined based on the solid waste generation, as shown below in Table 3.13-4.

The determination of impacts on electricity and natural gas supplies depends on an estimation of demand generated by the proposed Project uses, as compared to availability and capacity of existing supplies and the conveyance infrastructure.

Energy Conservation

The proposed Project was analyzed in this Draft SEIS/SEIR to determine whether the development would result in efficient and necessary consumption of energy. Relevant proposed Project elements, such as new buildings, were described in terms of energy efficiency in order to analyze future energy consumption.

PLAMT would design and build all three buildings that are proposed for construction at the Marine Terminal under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. This system provides certifications that a building project is designed, constructed, and operated at high performance green building

standards. To earn a LEED certification, a building project must meet certain prerequisites and earn performance benchmarks within each category. The six categories include Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, and Innovation in Design. The prerequisites that are met and the benchmarks that are earned determine the level of LEED certification, which can be Certified, Silver, Gold, or Platinum (U.S. Green Building Council 2007).

School Services

Development of the proposed Project would not result in any impact on the demand for school services, and is therefore not discussed further. As explained in Chapter 7, the proposed Project would not induce growth or population migration. Short-term construction employees, as well as long-term employees, would be accommodated by the existing local labor pool within the greater Los Angeles area. The proposed Project would not result in impacts to school services associated with increases in population on the surrounding communities, including Wilmington and San Pedro, as no increase in population would occur.

3.13.4.1.1 CEQA Baseline

Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of a project that exist at the time of the NOP. These environmental conditions would normally constitute the baseline physical conditions by which the CEQA lead agency determines whether an impact is significant. For purposes of this Draft SEIS/SEIR, the CEQA Baseline for determining the significance of potential impacts under CEQA is June 2004. CEQA Baseline conditions are described in Section 2.6.2.

The CEQA Baseline represents the setting at a fixed point in time, with no project growth over time, and differs from the "No Federal Action/No Project" Alternative (discussed in Section 2.5.2.1) in that the No Federal Action/No Project Alternative addresses what is likely to happen at the site over time, starting from the baseline conditions. The No Federal Action/No Project Alternative allows for growth at the proposed Project site that would occur without any required additional approvals.

3.13.4.1.2 NEPA Baseline

For purposes of this Draft SEIS/SEIR, the evaluation of significance under NEPA is defined by comparing the proposed Project or other alternative to the No Federal Action scenario (i.e., the NEPA Baseline and No Federal Action Alternative are equivalent for this project). Unlike the CEQA Baseline, which is defined by conditions at a point in time, the NEPA Baseline/No Federal Action is not bound by statute to a "flat" or "no growth" scenario; therefore, the USACE may project increases in operations over the life of a project to properly analyze the NEPA Baseline/No Federal Action condition.

The NEPA Baseline condition for determining significance of impacts is defined by examining the full range of construction and operational activities that are likely to occur without a permit from the USACE. As documented in Section 2.6.1, the USACE, the LAHD, and the applicant have concluded that no part of the proposed Project would be

built absent a USACE permit. Thus, for the case of this project, the NEPA Baseline is identical to the No Federal Action/No Project Alternative (see Section 2.6.1). Elements of the NEPA Baseline include:

- Paving, lighting, fencing, and construction of an access road at Tank Farm Site 1 to allow temporary storage of chassis-mounted containers on the site by APM;
- Paving, fencing, and lighting at Tank Farm Site 2 to accommodate temporary wheeled container storage by APL or Evergreen; and
- Additional crude oil deliveries at existing crude oil terminals in the San Pedro Bay Ports.

Significance of the proposed Project or alternative is defined by comparing the proposed Project or alternative to the NEPA Baseline (i.e., the increment). The NEPA Baseline conditions are described in Section 2.6.1 and 2.5.2.1.

3.13.4.2 Thresholds of Significance

The following significance criteria are based on the *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006a) and other criteria applicable to LAHD projects. According to the *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006a), a project would normally be considered to have a significant impact on fire protection and law enforcement services based on several underlying factors that can affect the need for additional infrastructure to maintain these public services. Although the *L.A. CEQA Thresholds Guide* does not address thresholds of significance in regards to the Port Police and the USCG, these law enforcement agencies serve the proposed Project and would potentially be affected by proposed Project activities. Accordingly, the LAHD has included the USCG and Port Police in this discussion. Therefore, the proposed Project would have a significant impact on *public services* if it would:

PS-1: Burden existing USCG, LAPD, or Port Police staff levels and facilities such that the USCG, LAPD or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects.

PS-2: Require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

The proposed Project would have a significant impact on *public utilities* if it would:

PS-3: Require or result in the construction or expansion of water, wastewater, storm drains, or electrical utility lines, the construction or expansion of which could cause significant environmental effects.

PS-4: Exceed existing water supply, wastewater treatment facilities, or landfill capacities.

PS-5: Require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alternations to existing facilities that are not anticipated by adopted plans or programs.

The discussion under PS-4 assumes implementation of AB 939 because the City is actively implementing measures to comply with AB 939 requirements, such as recycling programs and other means of complying with the California Solid Waste Reuse and Recycling Access Act to reduce the generation of solid waste and assist the City in maintaining solid waste diversion goals pursuant to AB 939.

3.13.4.2.1 Proposed Project Public Services Relocation Plan

As part of the proposed Project, the LAHD would prepare a Public Services Relocation Plan to address the public utilities and services that would require relocation or otherwise be affected during the proposed Project construction. The Plan would be developed with input from the service providers for the proposed Project site and would be submitted to City regulatory departments for review and approval. Construction affecting utilities could not begin until the Plan is approved. The Plan would be on file with the LAHD during construction. The Plan would include the following measures:

- Prior to disconnecting any existing services, new facilities (e.g., water, sewer, communications, gas, electricity) would be installed. Pipeline installation would occur within existing utility corridors/easements.
- Minor service interruptions (defined as those lasting 1 day or less) may occur when onsite utilities are connected with in-street utility services. Affected properties would be properly notified prior to any service interruption.
- Full access to all utilities would be restored after the completion of proposed Project construction.

3.13.4.3 Project Impacts and Mitigation

3.13.4.3.1 Proposed Project

Impact PS-1: The proposed Project would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects.

Construction activities would not increase demand on police protection services because of a possible increased security risk or the presence of employees during construction. However, construction activities have the potential to reduce response times where traffic detours or congestion results. The analysis of the proposed Project on traffic congestion and intersection levels of service is contained in Section 3.6, Ground Transportation. The contractor would be required pursuant to the Public Services Relocation Plan (Section 2.4.3.5) to coordinate with LAPD and the Port Police to allow for the identification of alternative response routes during all construction phases, thereby preventing the temporary interruption and/or delays for law enforcement responses. Additionally, proposed Project construction would require the use of one or

more sites for construction staging of equipment and materials, which would be vulnerable to unauthorized trespassing or theft; however, private security provided by the construction contractor and LAPD, as needed, would protect against such risk.

The LAPD is not the primary police service provider in the Port area and primarily provides support to the Port Police under special circumstances (as described in Section 3.13.2.1.2). The Port and individually operated terminals might be recognized as sites at heightened risk for terrorism, which is a special circumstance under which the LAPD would respond. Therefore, recent protocols have been implemented which require a security plan and strict procedures for each terminal operator. The proposed Project would include development and approval of a security plan. The security plan would be prepared in accordance with the Maritime Transportation Security Act of 2002 (46 Code of Federal Regulations [CFR] 701) and 33 CFR 101-106. The plan would be approved by the USCG in collaboration with local LAHD and police authorities. In order to maintain security, the specifics of the plans would not be released to the public. The security plan's design would include local and remote monitoring systems, equipment systems, terminal personnel training programs, and emergency response procedures. All facilities would be within a perimeter security barrier/fence around the sites. Additional details of the security protocols for the Marine Terminal and Tank Farm Sites 1 and 2 are described in Section 3.12.2.6 and the Project Description. These strict individual security parameters for each terminal operator contribute considerably to managing potential crime and work in concert with local police authorities. For additional discussion of the risk for terrorism, see Section 3.12 Risk of Upset/Hazardous Materials. With the implementation of the security measures described above, the proposed Project would result in a minimal increased likelihood that a special circumstance situation might occur (i.e., terrorism). This would result in a negligible increase in demand on the LAPD because such situations would be rare or would not occur at all.

Proposed terminal operations would result in increased vessel traffic in the proposed Project area; however, the corresponding increase in demands for law enforcement would be infrequent because the proposed Project includes basic security equipment, including perimeter security fencing, 24-hour guard service, cameras with local and remote monitoring and control, and a perimeter security system with remote monitoring and alarm notification. Specifically, the proposed Project would not burden the Port Police such that they would not be able to maintain an adequate level of service. Table 3.13-1 demonstrates that proposed development of 53.2 acres (0.093 square miles) of terminal lands would require less than one (i.e., 0.059) new Port Police officer (as determined by applying the Port Police service ratio of 0.72 officers per square mile of developed Port land). This represents a negligible increase in demand for police protection personnel. Due to the ongoing increase in Port Police staffing levels in conjunction with Port development, existing service ratios would not decrease and average response times would not increase above the existing five minutes or less (personal communication, C. Provinchain, 2007).

Construction of all proposed Project components would be entirely land-based, with the exception of the proposed Marine Terminal, and would, therefore, not affect marine traffic or USCG operations. Construction of the Marine Terminal at Pier 400 would require use of marine-based construction equipment to support development of the berth (e.g., pile driving) and installation of a Spill Containment System such as a boom. Any support boat to be used during these construction activities would be significantly smaller and more mobile than the tankers that would be berthed at Pier 400 during

proposed Project operations. As standard safety precautions would be utilized by the LAHD (see Section 3.9, Marine Transportation) in piloting these vessels through harbor waters, the short-term presence of a support boat at the proposed Berth 408 would not reduce the existing level of safety for vessel navigation in the Port and would not affect USCG's ability to maintain an adequate level of service.

The available statistical data on accidents that involve ships and tankers (see Section 3.9.4.3.1.2) lead to the conclusion that proposed Project tankers are likely to have one ACG incident during the life of the Project. However, the potential for this to happen is minimized by the proposed Project's location, which requires minimal transit time from the Angels Gate entry to Pier 400 and is away from the Main Channel where the highest level of ship traffic occurs. Additionally, the International Safety Guide for Oil Tankers and Terminals (ISGOTT) and the Oil Companies International Marine Forum (OCIMF) Tanker Mooring Guidelines would be adhered to for tanker mooring and operations at the terminal. The USCG determines response times based on the distance that is required to travel to the various Port facilities. Proposed development would not affect USCG response times as the proposed Project would be located within the same operating distance of other facilities within the jurisdiction of Sector Los Angeles and Long Beach; therefore, response times would not increase due to the proposed Project. As described in Table 2-1, the proposed Project would result in an increase in annual vessel calls; however, this increase would not diminish the resources or response times provided by the USCG (personal communication, P. Gooding 2007) due to adequate staffing levels and the fact that, although vessel calls will increase annually, daily calls are expected to remain the same.

CEQA Impact Determination

As previously described in Section 3.13.2.1.2, existing response times provided by the USCG, LAPD, and Port Police are considered adequate. Proposed Project construction would have the potential to reduce response times where traffic detours or congestion results, thereby increasing law enforcement response times. However, construction contractors would be required pursuant to the Public Services Relocation Plan to coordinate with LAPD and Port Police to establish alternative response routes, ensuring continuous law enforcement access to surrounding areas. Although Marine Terminal operations would result in a minimal increase in calls to the Port Police and/or LAPD, provisions for security features including perimeter security fencing, 24-hour guard service, cameras with local and remote monitoring and control, a perimeter security system with remote monitoring and alarm notification, and additional security features mandated by the MTSA would reduce the demand for law enforcement. As shown in Table 3.13-1, operation of the proposed Project would require 0.059 new officers. CEQA Baseline conditions do not produce a demand for officers, so the proposed Project related demands represent a total increase over baseline conditions. The proposed Project would be located within the same operating distance of other facilities served by the USCG and would therefore not increase emergency response times. Additionally, at the maximum capacity level of operations (reached in 2025), the proposed Project would result in an increase of 249 vessel calls per year over CEQA Baseline levels, which would not reduce available USCG resources or increase response times due to adequate staffing levels and the fact that, although vessel calls will increase annually, daily calls are expected to remain the same. Accordingly, the proposed Project would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an

adequate level of service without additional facilities, the construction of which could cause significant environmental effects, and impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

The proposed Project would include development of a Marine Terminal and Tank Farm Sites, which would require a greater total site area compared to NEPA Baseline conditions; however, the associated increase in calls to the Port Police and LAPD would not substantially impact existing levels of service during proposed Project construction as the proposed Project includes security features consistent with MTSA regulations that would minimize the demand for police protection. The proposed Project would result in a total area of 53.2 acres and a corresponding Port Police demand of less than one (i.e., 0.059) officer. This demand is slightly greater than the 0.012 officers required by the 10.7 acre temporary storage site under baseline conditions. The proposed Project would be located within the same operating distance of other facilities served by the USCG and would therefore not increase emergency response times. Additionally, since the proposed Project would see more vessel calls at the maximum capacity level of operation than the NEPA Baseline (i.e., 201 vessel calls in the Port under the proposed Project as compared to 267 vessel calls in the San Pedro Bay Ports under the NEPA Baseline), available USCG resources and response times within either of the San Pedro Bay Ports would be substantially similar. Accordingly, the proposed Project would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects, and less than significant impacts would occur under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Impact PS-2: Development of the proposed Project would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

Construction activities would not be expected to substantially increase the risk of fire or other emergencies. However, construction of a crude oil Marine Terminal may result in an accidental spill and require the response of LAFD. The analysis of construction-related hazards is contained in Section 3.12, Risk of Upset/Hazardous Materials. Standard prevention measures (e.g., BMPs identified in the tenant's SWPPP) would be

implemented during construction to reduce the potential for construction-related accidents. As standard prevention measures would be implemented that would reduce construction-related accidents, the demand on LAFD to respond to such construction-related accidents and emergencies would be minimal. Therefore, there would not be a need for new or expanded facilities during proposed Project construction to maintain service objectives.

As discussed in Section 3.13.2.2, the citywide average response time for fire and EMS is approximately 8 to 10 minutes (City of Los Angeles 2001). To the proposed Project site, the average response time of land-based fire services is 3 to 5 minutes, which is much lower than the citywide average. The water-based fire services average response time ranges from 4 minutes to 15 minutes.

The fire fighting systems for each area of the proposed Project would be designed in accordance with applicable City of Los Angeles Fire Codes (See Chapter 2, Project Description, for a complete description). As part of the detailed design process, approved standards for minimum emergency equipment access would be applied to ensure adequate emergency circulation throughout each site (this includes adequate roadway width, turning radii, and staging areas for emergency equipment).

The Marine Terminal would be equipped with a complete fire suppression system. Each fire fighting location would have a connection to the LADWP fire water supply line, a high-volume fire pump, aqueous foam fire-fighting (AFFF) storage and injection capability, and fixed monitor and hose reel stations. At Berth 408, fire pumps would have the capability to draw upon seawater for use in the event of a water supply emergency. Both fire truck and fireboat connections would be provided to enable access for additional emergency fire fighting resources. The fire pumps at the Marine Terminal would be electrically driven and backed up by a standby power generator. Devices capable of detecting the presence of open flames ("fire eyes") would be installed at the Marine Terminal. Fire eyes and a fire suppression system similar to what would be installed at the Marine Terminal would also be installed at Tank Farm Sites 1 and 2 and would function in the same manner as described above. Each Tank Farm would be protected by a firewater loop line and equipped with a foam storage tank and mixing skid. The crude oil tanks would be equipped with a foam ring, and injector/mixing nozzles. All systems would be monitored locally from the Marine Terminal Control Building and remotely from the Operation Control Center.

The terminal operator would also prepare an Oil Spill Response Plan (OSRP) for review and approval by appropriate federal, state, and local agencies (including the USCG, Department of Fish and Game, Office of Spill Prevention and Response, the California State Lands Commission). Chapter 2 and Section 3.12, Risk of Upset/Hazardous Materials, provide further detail on the proposed Project's handling of hazardous materials and associated emergency response plans.

LAFD emergency response times during proposed Project construction and operations would be affected only by changes to land use and accessibility to the site (personal communication, F. Comfort, 2007). As discussed in Section 3.8.4.3.1 under Impact LU-2.1, land use designations would remain the same under the proposed Project for both the Marine Terminal and Tank Farm Sites, and would be consistent with the short-term and long-term uses defined in the PMP, RMP, and City of Los Angeles Planning and Zoning Code. No access roads would be altered or removed during proposed Project

construction or operation; however, traffic congestion could occur during proposed Project construction, potentially increasing LAFD emergency response times. Construction contractors would coordinate with LAFD pursuant to the Public Services Relocation Plan prior to commencement of construction activities to identify alternative response routes, ensuring continuous adequate fire and emergency vehicular access to the proposed Project area. For the reasons described above, operation of the proposed Project would not result in an increase in average emergency response times and the LAFD would be able to accommodate proposed Project related fire protection demands.

CEQA Impact Determination

Proposed Project construction would have the potential to reduce response times where traffic detours or congestion results, thereby increasing LAFD emergency response times. However, construction contractors would coordinate with LAFD pursuant to the Public Services Relocation Plan prior to commencement of construction activities to identify alternative response routes, ensuring continuous adequate fire and emergency vehicular access to the proposed Project area. Any removal and/or relocation of fire hydrants, water supply trunk lines, and distribution mains in the proposed Project area would be conducted in accordance with the proposed Public Services Relocation Plan, which is described in Section 2.4.3.5, and subject to review and approval by the LAFD and LADWP. Therefore, the proposed Project construction would not impede emergency response services in the proposed Project area. As fire protection features, such as firewater mains and fire monitors, would be incorporated into the design process, proposed Project operations would not substantially increase the demand for fire protection services. Furthermore, the LAFD would be notified in advance and afforded the opportunity to review and comment on any proposed Project features affecting emergency access. Project operations would not affect emergency response times as the site would have the same land use, no existing fire lanes or hydrants would be removed, and site access would be reviewed by the LAFD. Because the proposed Project construction and operations would not increase the demand for fire services to a degree that would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

The proposed Project would include development of a Marine Terminal and two Tank Farm sites that would not be part of the NEPA Baseline. Proposed Project construction would have the potential to reduce response times where traffic detours or congestion results, thereby increasing LAFD emergency response times. However, construction contractors would coordinate with LAFD pursuant to the Public Services Relocation Plan prior to commencement of construction activities to identify alternative response routes, ensuring continuous adequate fire and emergency vehicular access to the proposed Project area. As fire protection features, such as firewater mains and fire

monitors, would be incorporated into the design process, proposed Project operations would not substantially increase the demand for fire protection services. Furthermore, the LAFD would be notified in advance and afforded the opportunity to review and comment on any proposed Project features affecting emergency access. However, these activities would not require removal and/or relocation of fire hydrants and utilities in the proposed Project area. Project operations would not affect emergency response times as the site would have the same land use, no existing fire lanes or hydrants would be removed, and site access would be reviewed by the LAFD. Because the proposed Project would not increase the demand for fire services to a degree that would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service, less than significant impact would occur under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Impact PS-3: The proposed Project would not result in a substantial increase in utility demands; however, construction and/or expansion of onsite water, wastewater, or storm drain lines would be required to support new terminal development.

Project construction would require infrastructure such as lighting and the addition of utility facilities to ensure optimum terminal productivity. New onsite utility lines (water, wastewater, and storm drains) would be constructed to serve proposed Marine Terminal operations; the relocation and/or extension of some existing utility lines would also occur. New water connections would be provided by LADWP, and new sanitary sewer connections provided by the City of Los Angeles Bureau of Sanitation. These new utilities would tie into the existing utility lines that currently serve the vicinity of the proposed Project site. Provisions for water and wastewater service to the proposed Project site would require some minor offsite construction to connect new utility with existing infrastructure. All infrastructure improvements and connections would occur within City streets, would comply with the City's municipal code as well as permits from applicable agencies (e.g., Los Angeles Regional Water Quality Control Board [LARWQCB]), and would be performed under permit by the City Bureau Engineering and/or LADWP. Additionally, the LAHD would prepare a Public Services Relocation Plan as part of the proposed Project (see Section 2.4.3.5) to address the public utilities that would be affected by proposed Project construction, which would be reviewed by the service providers and City departments prior to implementation.

Implementation of the proposed Project would generate minimal increased demands for water consumption associated with onsite usage (restrooms and sinks in buildings, berthing vessels taking on water) and/or general site maintenance (washing). Additional trunk lines and distribution lines would need to be extended to direct water to the new Marine Terminal facilities and Tank Farm sites. However, as the proposed Project has limited building development and would not include major water consuming industrial or commercial processes, terminal construction and operation would not require

substantial quantities of water. Trunk lines and distribution mains in the proposed Project area would be constructed consistent with the proposed Project's Public Services Relocation Plan.

The proposed Project would also result in minimal increases in wastewater demands. Increased staff levels associated with proposed construction and operation would generate minor increase wastewater flows. Wastewater flows generated from implementation of the proposed Project would be conveyed to, and treated by, the TITP. Based on the wastewater generation factor of 150 gallons per day per person (personal communication, D. Gumaer, 2007), Project construction activities would generate 0.01 million gallons per day, and Project operation would generate 0.006 million gallons per day, as shown in Table 3.13-3. The TITP currently operates at 54 percent capacity. The City projects that by 2020, wastewater flows in the TITP service area will grow from the current 16.2 mgd (about 54 percent of TITP capacity) to 19.9 mgd (City of Los Angeles 2006b); therefore, approximately 10 mgd in daily capacity at TITP would remain unused and available for future years. The negligible increase in wastewater flows from the proposed Project construction and operation would not exceed the capacity of the Treatment Plan or conveyance system due to the substantial remaining capacity at TITP beyond 2020, which is estimated to adequately handle 2025 and 2045 wastewater flow demands.

A storm water treatment and discharge system would be installed as part of the proposed Project. A storm water collection system consisting of collection headers and isolation valves would be installed in the tank dike containment areas for each Tank Farm. Storm water collected in the tank dike containment areas during storms would be directed to a treatment system that would include oil/water separation, filtration, and carbon adsorption to remove hydrocarbons.

New equipment areas would be sloped and graded so that rainwater, equipment wash downs, and any equipment leaks would drain to a collection apron or a buried piping network. The drain system would be designed to allow safe drainage of firewater during a fire-fighting situation. Any liquids collected in drains within the new equipment areas would be collected in a sump, for eventual disposal through pumping in the outbound pipeline or to a transport truck. Stormwater falling inside of bermed or diked equipment or processing areas would flow to a storm water treatment system for removal of oil and grease. Treated water would be discharged under an approved National Pollutant Discharge Elimination System (NPDES) permit.

CEQA Impact Determination

As shown in Table 3.13-2, construction of the proposed Project would result in a water demand that would represent 0.0021 percent of the available water supply; proposed Project operation water demands would represent 0.0013 percent of the available water supply. Construction and/or expansion of onsite water lines would be required to support new terminal development; however, the water mains serving the Project area and LADWP supplies have sufficient capacity to accommodate water required to support proposed Project operations.

Project construction would generate 0.01 mgd of wastewater and proposed Project operation would generate 0.007 mgd (Table 3.13-3). The amount of wastewater generated by the Project would exceed that of the CEQA Baseline; however, it would

not significantly affect existing or future capacity at TITP due to the substantial remaining capacity at TITP beyond 2020, which is estimated to adequately handle 2045 wastewater flow demands. The proposed Project area is served by existing wastewater conveyance systems that would not be significantly affected by wastewater generated during construction.

The development of the Project site would include an onsite drainage system that would convey site runoff directly to the Harbor. Because the Project site is adjacent to the Harbor, construction and/or expansion of offsite stormwater drainage facilities would not be required or affected.

As previously stated, the Port would prepare a Public Services Relocation Plan as part of the proposed Project to address the public utilities that would be affected by proposed Project construction, which would be reviewed by the service providers and City departments prior to implementation. Because new utility lines would be located within exiting City streets or existing pipeline corridor easements, utility connections would comply with the City's municipal code, and would be performed under permit by the City Bureau of Engineering and/or LADWP. Modifications of or connections with utility lines would not result in significant environmental impacts. Therefore, impacts to public utility locations or alignments would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

As shown in Table 3.13-2, construction of the proposed Project would result in a water demand that would represent 0.0021 percent of the available water supply; proposed Project operation water demands would represent 0.0013 percent of the available water supply. NEPA Baseline conditions would only have minimal water demands during construction (i.e., paving and installing access roads) and would not demand any water during operational activities. Construction and/or expansion of onsite water lines would be required to support new terminal development; however, the water mains serving the Project area and LADWP supplies have sufficient capacity to accommodate water required to support proposed Project operations.

As shown in Table 3.13-3, proposed Project construction would generate 0.01 million gallons per day and operation would generate 0.007 million gallons per day. Similar to water demands, NEPA Baseline conditions would only generate minimal wastewater during site improvements and would not generate any wastewater during operations as no employees would be present. Proposed Project generations would not significantly affect existing or future capacity at TITP due to the substantial remaining capacity at TITP beyond 2020, which is estimated to adequately handle 2045 wastewater flow demands. The proposed Project area is served by existing wastewater conveyance systems that would not be significantly affected by wastewater generated during construction.

The development of the Project site would include an onsite drainage system that would convey site runoff directly to the Harbor. Because the Project site is adjacent to the Harbor, construction and/or expansion of offsite stormwater drainage facilities would not be required or affected.

As previously stated, the Port would prepare a Public Services Relocation Plan as part of the proposed Project to address the public utilities that would be affected by proposed Project construction, which would be reviewed by the service providers and City departments prior to implementation. Because new utility lines would be located within exiting City streets or existing pipeline corridor easements, utility connections would comply with the City's municipal code, and would be performed under permit by the City Bureau of Engineering and/or LADWP. Modifications of or connections with utility lines would not result in significant environmental impacts. Therefore, impacts to public utility locations or alignments would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Impact PS-4: The proposed Project would not generate substantial water and/or wastewater demands that would exceed the capacity of existing facilities in the proposed Project area. The proposed Project would generate substantial solid waste demands that could exceed capacities.

As stated previously (see Impact PS-3), new onsite utility lines/infrastructure (water, wastewater, and storm drains) would be constructed to serve proposed Marine Terminal and Tank Farm operations and would be designed to accommodate water and wastewater demands that would be created by onsite development and Marine Terminal and Tank Farm operations. Because the proposed Project construction would be completed prior to 2015, the applicant would not be required to file an SAR with the LADWP, as described in Section 3.13.2.2.1.

As shown in Table 3.13-2, construction of the proposed Project would result in a water demand of approximately 14.3 acre feet, or 0.0021 percent of the available water supply in 2010 of 683,000 acre feet. In addition to daily construction water needs, water must also be supplied for hydrostatic testing of the pipeline segments. Hydrotest water would be obtained from LADWP sources in the area. Transferring the water used for each hydrotest from one component to another would minimize the amount of water that would be used for hydrostatic tests. Hydrotest water would be collected, treated, and discharged in accordance with a NPDES permit issued by the LARWQCB. The quantity of water used for these purposes would not be sufficient to burden regional water supplies, as the amount used for this purpose would be comparatively minimal. Operation of the proposed Project would result in a water demand of approximately 9.8 acre feet per year, or 0.0013 percent of the available water supply in 2025 of 755,000 acre feet. The marine berth fire pumps would have the capability to draw upon seawater for use in the event of a water supply emergency. The 2005 UWMP includes Project water demand and shows that water supply will meet overall LADWP demand

(including the Project) in 2030. Maximum Project water demand would be reached in 2025, which is within the UWMP timeframe. Water is expected to be continued to be supplied to the Project after 2025 under future water planning and updated UWMPs (required every 5 years) because the Project demand would be treated as existing demand in future water supply planning. Based on the ongoing water demand and supply planning and management efforts of the City, the negligible incremental difference in water demand would not significantly affect water supplies or water distribution infrastructure.

As shown in Table 3.13-3, Project construction would generate 0.01 million gallons of wastewater per day and proposed Project operation would generate 0.004 million gallons per day, or 0.08 and 0.02 percent of existing TITP flow, and 0.05 and 0.01 percent of TITP capacity, respectively. The minimal amounts of wastewater generated by proposed Project construction and operation would not exceed the capacity of the TITP or sewer trunk lines in the vicinity of the proposed Project due to the substantial remaining capacity at TITP beyond 2030, which is estimated to adequately handle 2025 and 2045 wastewater flow demands.

Construction activities would generate debris that would require disposal in a landfill. Construction debris is one of the greatest individual contributors to solid waste capacity, making up approximately 22 percent of the State of California's waste disposal demand (CIWMB 2004). Solid wastes generated from construction would generally be in the form of short sections of line pipe, wastes from welding and coating, as well as boxes and crates used in the shipment of materials. Recyclable materials, which would constitute most of the solid waste, would be hauled to local recycling centers, as is common in most construction projects in the region. Waste that is not recyclable would be taken to a local landfill. Trash containers, including containers for disposal of recyclable material, would be provided for daily refuse generated by construction workers. Other construction wastes might include contaminated soils, asphalt, concrete, and contaminated water used in hydrostatic test of the pipelines. The non-hazardous wastes would be hauled to a sanitary landfill or recycler. Please see Section 3.12 Risks of Upset/Hazardous Materials for additional discussion on hazardous wastes. Proposed construction activities would generate 5,524 tons of solid waste, which would be a substantial one-time contribution to the solid waste stream, possibly contributing to the exceedance of solid waste facility capacities (see detailed calculations provided in Appendix S)

Proposed Project operations would result in a negligible increase in the generation of solid waste. The proposed Project would comply with federal, state, and local regulations and codes pertaining to solid waste disposal. Solid waste would largely be composed of food wrappers, paper products, and personal waste. Other waste, such as oil coated rags, and miscellaneous non-hazardous trash would be collected on-site in containers and transported from the site periodically by approved methods. Please see Section 3.12 Risks of Upset/Hazardous Materials for discussion on hazardous waste. Operation of the proposed Project would be required to comply with applicable waste diversion requirements, as well as all existing hazardous waste laws and regulations, including the federal Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and California Code of Regulations (CCR) Title 22 and Title 26.

Based on the solid waste generation factor of 0.372 ton per year per acre of land (LAHD 2005), the proposed Project would generate approximately 17.9 tons of solid waste per year (0.053 ton per day) that would require transportation to Chiquita Canyon Landfill, Sunshine Canyon Landfill, or other disposal facility. This amount represents 0.000010 percent of the permitted daily capacity of 5,000 tons at Chiquita Canyon Landfill, 0.000011 percent of the permitted daily capacity of 5,500 at the Sunshine Canyon Landfill, or 0.00009 percent of the available permitted daily capacity at the El Sobrante Landfill. The landfills would be able to accommodate the negligible increase in solid waste generated by Project operations through their respective closure dates estimated to be approximately 2030. Solid waste generated from Project operations after closure of the Chiquita Canyon Landfill, the Sunshine Canyon Landfill, and the El Sobrante Landfill (2030 and after) would represent a significant impact to landfill capacity. However, if additional adequate landfill capacity is permitted and made available, if more distant landfill capacity is utilized for solid waste generated in the City, and/or if the achievement of Zero-Waste solutions in the City occurs over an extended time period, then the solid waste generated by the Project likely would not represent a significant impact to landfill capacity.

CEQA Impact Determination

The proposed Project collectively constitutes negligible demands for water and wastewater supplies that would be accommodated by LADWP, onsite water supply sewer infrastructure, and existing TITP capacity. Construction of the proposed Project would result in a water demand of approximately 14.3 acre feet, or 0.0021 percent of the LADWP water supply of 683,000 acre feet in 2010. The proposed Project would result in a water demand of approximately 8,728 gallons per day, or 9.8 acre feet per year at the full-capacity level of operation. This would represent 0.0013 percent of the projected available water supply of 755,000 acre feet in 2025. There is no water demand associated with CEQA Baseline conditions, and all proposed Project related demands would represent an increase over baseline conditions. Because the UWMP addresses water supply for the City of Los Angeles, and because the Project site and the Port of Los Angeles are a part of the City, the UWMP accounts for the water usage of the Project. In addition, the UWMP is required to be updated every 5 years, thus water demand and supply planning would be continued. Based on efforts by the City for ongoing water demand and supply planning and management, the negligible incremental difference in water demand would not significantly affect water supplies or water distribution infrastructure.

Construction of the proposed Project would result in a wastewater generation of 0.01 million gallons per day. Operational generations would be 0.007 million gallons per day. Proposed Project generated wastewater would constitute 0.05 percent of the TITP daily capacity during construction activities and 0.02 percent during operational activities. As there is no wastewater generations associated with CEQA Baseline conditions, all proposed Project related demands would represent an increase over baseline conditions. However, as the TITP currently operates at 54 percent capacity, these increases would be negligible. The amount of wastewater generated by the Project would not significantly affect existing or future capacity at TITP due to the limited operational Project flows and the substantial remaining capacity at TITP beyond 2020, as described previously. Therefore, impacts associated with exceeding the capacity of the existing water supply and the TITP wastewater treatment facility would be less than significant.

The amount of solid waste generated by construction activities would total approximately 5,524 tons, which would be a substantial one-time contribution to the solid waste stream, possibly contributing to the exceedance of solid waste facility capacities. Because construction waste is one of the greatest individual contributors to reductions in solid waste capacity, impacts associated with solid waste generation from Project construction are assumed to be significant under CEQA.

Although hazardous materials could be encountered and require disposal during construction activities, several contaminated soil treatment and disposal options and Class I landfills are available for offsite disposal, providing adequate capacity. Because of this, impacts related to exceeding the capacity of a Class I landfill would be less than significant.

The proposed Project would generate 17.9 tons of solid waste per year during operations, representing 0.000010 percent of the permitted daily capacity of 5,000 tons at Chiquita Canyon Landfill, 0.000011 percent of the permitted daily capacity of 5,500 at the Sunshine Canyon Landfill, or 0.00009 percent of the available permitted daily capacity at the El Sobrante Landfill. As no solid waste is generated under CEQA Baseline conditions, all proposed Project operation generations would represent an increase over baseline conditions. Solid waste generated from Project operations after closure of the Chiquita Canyon Landfill, the Sunshine Canyon Landfill, and the El Sobrante Landfill (2030 and after) might represent a significant impact to landfill capacity if no new capacity were available and landfill demand remains constant. However, additional adequate landfill capacity is expected to be permitted and made available, including the utilization of more distant landfill capacity for solid waste generated in the City. Additionally, the achievement of Zero-Waste solutions in the City will reduce the overall need for landfill capacity. Thus, the post-2030 solid waste generated by the Project would not represent a significant impact to landfill capacity.

In conclusion, impacts associated with exceeding the capacity of the existing water supply and the TITP wastewater treatment facility would be less than significant. However, as solid waste generated during construction activities is one of the greatest individual contributors to solid waste capacity and would represent a substantial one-time contribution to the solid waste stream, impacts associated with solid waste generation during construction activities would be significant under CEQA.

Mitigation Measures

Although impacts on water supply would be less than significant, **MM 4N-1** from the Deep Draft FEIS/FEIR would apply. This measure requires that water conservation devices and systems be incorporated into project designs, including those required by the State of California Department of Water Resources. These include the following:

- Any landscape plans shall emphasize a planting scheme that minimizes water irrigation requirements and shall use drought-resistant, native vegetation.
- The proposed Project shall pursue the use of reclaimed water from the Terminal Island Treatment Plant for use in terminal operations.
- The use of seawater for fire suppression shall be investigated.

In addition, the following measures would reduce the amount of solid waste requiring transportation to a landfill that would be generated during proposed Project construction:

MM PS-1: Recycling of Construction Materials. Demolition and/or excess construction materials shall be separated on-site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials shall be provided on-site.

MM PS-2: Materials with Recycled Content. Materials with recycled content shall be used in project construction. Chippers on site during construction shall be used to further reduce excess wood for landscaping cover.

MM PS-3: Solid Waste Integrated Resources Plan Compliance. To ensure adequate long-term solid waste management, the proposed Project will be required to comply with policies and standards set forth in the City's Solid Waste Integrated Resources Plan (SWIRP) following 2025.

Residual Impacts

Impacts to water supply and wastewater treatment capacity would be less than significant. Implementation of **MMs PS-1** and **PS-2** would reduce proposed Project construction-related solid waste generation, ensuring less than significant impacts through approximately 2030 when existing landfills are projected to close. **MM PS-3** would ensure adequate long-term solid waste management for the proposed Project starting from 2025. Long-term impacts to solid waste disposal would be less than significant after mitigation.

NEPA Impact Determination

As discussed under **Impact PS-3**, the proposed Project collectively constitutes negligible demands for water and wastewater supplies that would be accommodated by LADWP, onsite water supply sewer infrastructure, and existing TITP capacity. Construction of the proposed Project would result in a water demand representing 0.0021 percent of the LADWP water supply, and operation would result in a water demand representing 0.0013 percent of the projected available water supply. Baseline condition demands and generations are minimal, and all proposed Project related demands are considered an increase over baseline conditions. Because the UWMP addresses water supply for the City of Los Angeles, and because the Project site and the Port of Los Angeles are a part of the City, the UWMP accounts for the water usage of the Project. In addition, the UWMP is required to be updated every 5 years, thus water demand and supply planning would be continued. Based on efforts by the City for ongoing water demand and supply planning and management, the negligible incremental difference in water demand would not significantly affect water supplies or water distribution infrastructure.

Construction of the proposed Project would result in a wastewater generation of 0.01 million gallons per day, and operational generations would be 0.007 million gallons per day. Proposed Project generated wastewater would constitute 0.05 percent of the TITP daily capacity during construction activities and 0.02 percent during operational activities. Under baseline conditions, site improvements (i.e., paving and installing access roads) would result in minimal water demands and wastewater generations; there would be no demands or generations during operations. Therefore, all proposed Project

related demands would represent an increase over baseline conditions. As the TITP currently operates at 54 percent capacity, these increases would be negligible. The amount of wastewater generated by the Project would not significantly affect existing or future capacity at TITP due to the limited operational Project flows and the substantial remaining capacity at TITP beyond 2020, as described previously. Therefore, impacts associated with exceeding the capacity of the existing water supply and the TITP wastewater treatment facility would be less than significant.

The amount of solid waste generated by construction activities would total approximately 5,524 tons, which would be a substantial one-time contribution to the solid waste stream, possibly contributing to the exceedance of solid waste facility capacities. Because construction waste is one of the greatest individual contributors to reductions in solid waste capacity, impacts associated with solid waste generation from Project construction are assumed to be significant under NEPA.

Although hazardous materials could be encountered and require disposal during construction activities, several contaminated soil treatment and disposal options and Class I landfills are available for offsite disposal, providing adequate capacity. Because of this, impacts related to exceeding the capacity of a Class I landfill would be less than significant.

The proposed Project would generate 17.9 tons of solid waste per year during operations, representing 0.000010 percent of the permitted daily capacity of 5,000 tons at Chiquita Canyon Landfill, 0.000011 percent of the permitted daily capacity of 5,500 at the Sunshine Canyon Landfill, or 0.00009 percent of the available permitted daily capacity at the El Sobrante Landfill. Under baseline conditions, site improvements (i.e., paving and installing access roads) would result in minimal solid waste generation; there would be no demands or generations during operations. As baseline condition generations are minimal, all proposed Project related generations are considered an increase over baseline conditions. Solid waste generated from Project operations after closure of the Chiquita Canyon Landfill, the Sunshine Canyon Landfill, and the El Sobrante Landfill (2030 and after) might represent a significant impact to landfill capacity if no new capacity were available and landfill demand remains constant. However, additional adequate landfill capacity is expected to be permitted and made available, including the utilization of more distant landfill capacity for solid waste generated in the City. Additionally, the achievement of Zero-Waste solutions in the City will reduce the overall need for landfill capacity. Thus, the post-2030 solid waste generated by the Project would not represent a significant impact to landfill capacity.

In conclusion, impacts associated with exceeding the capacity of the existing water supply and the TITP wastewater treatment facility would be less than significant. However, as solid waste generated during construction activities is one of the greatest individual contributors to solid waste capacity and would represent a substantial one-time contribution to the solid waste stream, impacts associated with solid waste generation during construction activities would be potentially significant under NEPA.

Mitigation Measures

Although impacts on water supply would be less than significant, **MM 4N-1** from the Deep Draft FEIS/FEIR would apply. **MMs PS-1** through **PS-3** would apply to the proposed Project construction solid waste impacts.

Residual Impacts

There would be less than significant impacts to water supply and wastewater treatment capacity. Implementation of **MMs PS-1** and **PS-2** would reduce proposed Project construction related solid waste generation, ensuring less than significant impacts through approximately 2030 when existing landfills are projected to close. **MM PS-3** would ensure adequate long-term solid waste management for the proposed Project starting from 2025. Long-term impacts to solid waste disposal would be less than significant after mitigation.

Impact PS-5: Implementation of the proposed Project would generate minor increases in energy demands; however, construction of new offsite energy supply facilities and distribution infrastructure would not be required to support proposed Project activities.

Energy (diesel fuel and electricity) would be used during construction of the proposed Project. Energy expenditures during construction would be short term in duration, occurring periodically during each of the proposed Project construction phases. Construction would not result in substantial waste or inefficient of energy because construction would be competitively bit, which would facilitate efficiency in all construction stages. Current LAHD bid specifications include provisions to reduce energy consumption, such as staging work during non-peak hours when appropriate. Additionally, construction of modern buildings and structures incorporates energy-efficient designs that are mandated by current building codes.

Proposed Project development would include installation of lighting, utilities, and buildings. Electricity demands as the proposed Project site would be related to industrial uses including vessel-unloading operations, transfer of crude oil, Alternative Marine Power (AMP) system usage (if AMP is implemented as a mitigation measure), site and security lighting, and general site maintenance. However, the increase in electricity demands associated with the Berth 408 Terminal operations would not exceed existing supplies and/or result in the need for major new facilities. The proposed Project would provide new energy distribution infrastructure required to support proposed Project operations. The proposed Marine Terminal and Tank Farm Site 1 would be served by a 34.5-kV electrical transmission service provided by the LADWP, electrical switch gear and motor control centers; power and control conduits and cables; terminal and building lighting systems; terminal grounding system; and miscellaneous associated electrical equipment. This equipment would be necessary to power the electric shore side pumps, provide general facility load, and to accommodate potential future electrical loads associated with “cold ironing” of tankers (if the AMP system is used as a mitigation measure). Tank Farm Site 1 would also be served by the same 34.5-kV electrical transmission service described above for the Marine Terminal. Tank Farm Site 2 would be served by a 34.5-kV electrical transmission service provided by the LADWP. The service would include extension of the existing 34.5-kV transmission line, a substation, and associated metering. The proposed electrical facilities would include associated electrical switchgear, step-down transformers, motor control centers, ground systems, conduit, wire, lighting, and associated electrical equipment.

Electricity for the proposed Project would be provided by the LADWP. The LADWP has ample generation capacity to meet the needs of its customers and will continue to do so with proper planning and development of facilities in accordance with the City

Charter. The LADWP electrical load is projected to grow at 1.1 percent per year over the next 20 years. Annual peak demand is projected to grow slightly slower, 1.0 percent per annum (Holloway 2002). Based on the LADWP IRP, electricity resources and reserves at LADWP will adequately provide electricity for the Project. The IRP does not provide load demand forecasts or supply resources because the IRP planning horizon extends only to 2025 (City of Los Angeles 2006b). However, because LADWP is required by the Charter to provide a reliable supply of electricity for its customers and because LADWP is moving toward increasing renewable energy supplies in its resource portfolio, the electricity demand of the proposed Project, by itself, would not result in the need to construct a new offsite power station or facility. For a discussion of cumulative impacts related to electricity demand, see Chapter 4.

The proposed Pier 400 Marine Terminal buildings (i.e., the Terminal Control Building, Administration Building, and Security Building) would be designed to and built under the LEED Green Building Rating System. This system provides certifications that a building project is designed, constructed, and operated at high performance green building standards. Additionally, the proposed Project would incorporate energy conservation measures in compliance with California's Building Code CCR Title 24 that requires building energy efficient standards for new construction (including requirements for new buildings, additions, alterations, and, in non-residential buildings, repairs). Incorporation of these design standards, as required by state law, would reduce wasteful energy consumption. In addition to energy efficient designs that are mandated by current building codes, onsite structures would be sited and constructed to maximize natural heating and cooling.

The proposed Project would generate minimal demands for natural gas associated with space and water heating. As administrative offices represent a minor component of proposed Project operations, the increased demand for natural gas would be accommodated by SCG via the existing infrastructure located adjacent to and within the proposed Project site.

CEQA Impact Determination

Energy (diesel fuel and electricity) would be required to support proposed construction activities. Energy demands during construction activities would be short-term and temporary and are not anticipated to result in the substantial waste or inefficient use of energy as a result of the competitive bid process that facilitates cost effective strategies that support energy efficiency and conservation throughout all construction stages, as described above. Project operations would generate demands for electricity associated with vessel-unloading operations, transfer of crude oil, AMP system usage (if AMP is used as a mitigation measure), site and security lighting, and general site maintenance.

Project-related natural gas demands (space and water heating) would exceed the usage under the CEQA Baseline, but would not be substantial because administration buildings represent a minor part of proposed terminal operations.

Electricity for the proposed Project would be provided by the LADWP. The LADWP has ample generation capacity to meet the needs of its customers and will continue to do so with proper planning and development of facilities in accordance with the City Charter. LADWP has communicated that it would be able to provide power to the proposed Project site because LADWP has more than enough electrical power to supply

the proposed container terminal (Joe 2005). Based on the LADWP IRP, electricity resources and reserves at LADWP will adequately provide electricity for the Project. The IRP does not provide load demand forecasts or supply resources beyond 2025 because its planning horizon extends only to 2025. However, because LADWP is required by the Charter to provide a reliable supply of electricity for its customers and because LADWP is moving toward increasing renewable energy supplies in its resource portfolio, the electricity demand of the proposed Project by itself would not result in the need to construct a new offsite power station or facility (for a discussion of cumulative impacts related to electricity demand, see Chapter 4).

As the proposed Project would provide new energy distribution infrastructure required to support proposed Project operations, and Berth 408 Terminal operations would not exceed existing supplies and/or result in the need for major new facilities. Additionally, the proposed Project would include three new buildings that would be built under the LEED Green Building Rating System in order to optimize energy efficiency. Consequently, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impacts.

NEPA Impact Determination

The proposed Project would include development of a Marine Terminal, two tank farm sites, and new pipelines that would not be part of the NEPA Baseline. Energy demands during construction activities would be short-term and temporary, and are not anticipated to result in the substantial waste or inefficient use of energy as a result of the competitive bid process that facilitates cost effective strategies that support energy efficiency and conservation throughout all construction stages, as described above. Project operations would generate demands for electricity associated with vessel-unloading operations, transfer of crude oil, AMP system usage (if AMP is used as a mitigation measure), site and security lighting, and general site maintenance.

Project-related natural gas demands (space and water heating) would exceed the usage under the CEQA Baseline, but would not be substantial because administration buildings represent a minor part of proposed terminal operations.

Electricity for the proposed Project would be provided by the LADWP. The LADWP has ample generation capacity to meet the needs of its customers and will continue to do so with proper planning and development of facilities in accordance with the City Charter. LADWP has communicated that it would be able to provide power to the proposed Project site because LADWP has more than enough electrical power to supply the proposed container terminal (Joe 2005). Based on the LADWP IRP, electricity resources and reserves at LADWP will adequately provide electricity for the Project. The IRP does not provide load demand forecasts or supply resources beyond 2025 because its planning horizon extends only to 2025. However, because LADWP is required by the Charter to provide a reliable supply of electricity for its customers and

because LADWP is moving toward increasing renewable energy supplies in its resource portfolio, the electricity demand of the proposed Project by itself would not result in the need to construct a new offsite power station or facility (for a discussion of cumulative impacts related to electricity demand, see Chapter 4).

Proposed Project energy demands would be greater than those under baseline conditions because only minimal energy would be demanded during site improvements (i.e., paving and installing access roads) and operations (i.e., lighting). However, as the proposed Project would provide new energy distribution infrastructure required to support proposed Project operations, and Berth 408 Terminal operations would not exceed existing supplies and/or result in the need for major new facilities. Additionally, the proposed Project would include three new buildings that would be built under the LEED Green Building Rating System in order to optimize energy efficiency. There would be less than significant impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

3.13.4.3.2 No Federal Action/No Project Alternative

Under the No Federal Action/No Project Alternative, proposed Project facilities would not be constructed or operated. As described in Section 2.5.2.1, the No Federal Action/No Project Alternative considers the only remaining allowable and reasonably foreseeable use of the proposed Project site: Use of the site for temporary storage of wheeled containers on the site of Tank Farm 1 and on Tank Farm Site 2. This use would require paving, construction of access roads, and installation of lighting and perimeter fencing.

In addition, for analysis purposes, under the No Federal Action/No Project Alternative a portion of the increasing demand for crude oil imports is assumed to be accommodated at existing liquid bulk terminals in the San Pedro Bay Ports, to the extent of their remaining capacities. Although additional demand, in excess of the capacity of existing marine terminals to receive it, may come in by rail, barge, or other means, rather than speculate about the specific method by which more crude oil or refined products would enter southern California, for analysis purposes, the impact assessment for the No Federal Action/No Project Alternative in this SEIS/SEIR is based on marine deliveries only up to the available capacity of existing crude oil berths. As described in Section 2.5.2.1, the impact assessment for the No Federal Action/No Project Alternative also assumes existing terminals would eventually comply with the California State Lands Commission (CSLC) Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS), that LAHD and the Port of Long Beach would renew the operating leases for existing marine terminals, and that existing terminals would comply with Clean Air Action Plan (CAAP) measures as of the time of lease renewal (i.e., 2008 for Port of Long Beach Berths 84-87, 2015 for LAHD Berths 238-240, and 2023 for Port of Long Beach Berths 76-78).

The NEPA Baseline condition coincides with the No Federal Action/No Project Alternative for this project because the USACE, the LAHD, and the applicant have concluded that, absent a USACE permit, no part of the proposed Project would be built (Section 2.6.1). All elements of the No Federal Action/No Project Alternative are identical to the elements of the NEPA Baseline. Therefore, under a NEPA determination there would be no impact associated with the No Federal Action/No Project Alternative.

Impact PS-1: The No Federal Action/No Project Alternative would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects.

CEQA Impact Determination

Construction and operation in the No Federal Action/No Project Alternative would result in a slight increase in demands for Port Police and LAPD services. As the Port Police determines the demand for additional officers based on area, the demand generated under construction and operations would be equal. As shown in Table 3.13-1, the 10.7 acres developed under the No Federal Action/No Project Alternative would result in a demand for less than one (i.e., 0.012) new officer. CEQA Baseline conditions do not produce a demand for officers, so the No Federal Action/No Project Alternative related demands represent a total increase over baseline conditions. No Federal Action/No Project Alternative demands are less than those for the proposed Project (i.e., 0.059 officers) because this alternative has a smaller area than the proposed Project. Incorporation of MTSA security features, including perimeter fencing and lighting, would further reduce demand on police protection. The No Federal Action/No Project Alternative would not affect USCG response times as the USCG determines response time based on the distance that is required to travel to the various Port facilities, and the alternative would be located within the same operating distance of other facilities within the jurisdiction of Sector Los Angeles and Long Beach. Although vessel calls would increase annually, USCG staffing levels are adequate, and daily calls are expected to remain the same. Consequently, the No Federal Action/No Project Alternative would not increase the demand for additional law enforcement officers and/or facilities such that the LAPD, Port Police, and USCG would not be able to maintain an adequate level of service without additional facilities. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Because the No Federal Action/No Project Alternative is identical to the NEPA Baseline in this project, under NEPA the No Federal Action/No Project Alternative would have no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

Impact PS-2: The No Federal Action/No Project Alternative would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

CEQA Impact Determination

The No Federal Action/No Project Alternative would not significantly affect fire protection services because it would not result in a land use change or unsafe site access that would jeopardize emergency response routes. Construction contractors would coordinate with LAFD pursuant to the Public Services Relocation Plan prior to commencement of construction of site improvements (i.e., paving the site and installing an access road) to identify alternative response routes, ensuring continuous adequate fire and emergency vehicular access to the No Federal Action/No Project Alternative area. The No Federal Action/No Project Alternative operations would not significantly affect emergency response times as the site would have the same land use, no existing fire lanes or hydrants would be removed, and site access would be reviewed by the LAFD. The No Federal Action/No Project Alternative fire protection demands would be less than the proposed Project because this alternative would not involve operation of the Marine Terminal or Tank Storage sites. As the No Federal Action/No Project Alternative would not increase the demand for fire services to a degree that would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Because the No Federal Action/No Project Alternative is identical to the NEPA Baseline in this project, under NEPA the No Federal Action/No Project Alternative would have no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

Impact PS-3: The No Federal Action/No Project Alternative would not result in a substantial increase in utility demands and construction and/or expansion of onsite water, wastewater, or storm drain lines would not be required to support new terminal development.

CEQA Impact Determination

Water demands associated with the No Federal Action/No Project Alternative would be minimal and would only occur during construction of the site improvements (i.e., paving the site and installing an access road). No Federal Action/No Project Alternative operational activities would not result in any water demands as no employees would be required. Baseline conditions do not have any water demands, and demands under the No Federal Action/No Project Alternative would represent a minimal and temporary increase over baseline conditions. These demands would, however, be less than the 14.3 and 9.8 acre feet demanded by proposed Project construction and operation, respectively. Similarly, wastewater generations associated with the No Federal Action/No Project Alternative would also be minimal and only occur during construction of the site improvements because no employees would be present during operations, representing minimal and temporary increase over baseline conditions. No Federal Action/No Project Alternative wastewater generations would be less than proposed Project demands of 0.01 million gallons per day.

Trunk lines and distribution mains would not be extended to direct water and wastewater to and from the new terminal facilities. Any water required during the No Federal Action/No Project Alternative construction would be brought to the site by truck (see Appendix S for more detail), and construction workers would utilize portable chemical toilets. As utility demands and generations are not affected by vessel calls, the increased vessel trips at LAHD Berths 238-240 and Port of Long Beach Berths 76-78 and 84-87 would not substantially impact utility services. Therefore, as no new utility lines would be required, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Because the No Federal Action/No Project Alternative is identical to the NEPA Baseline in this project, under NEPA the No Federal Action/No Project Alternative would have no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

Impact PS-4: The No Federal Action/No Project Alternative would not generate substantial solid waste, water, and/or wastewater demands that would exceed the capacity of existing facilities in the proposed Project area.

CEQA Impact Determination

As discussed under **Impact PS-3**, the No Federal Action/No Project Alternative would not require a substantial amount of water or produce a substantial amount of wastewater. Water demands associated with the No Federal Action/No Project Alternative would be minimal and would only occur during construction of the site improvements (i.e., paving the site and installing an access road). No Federal Action/No Project Alternative operational activities would not result in any water demands as no employees would be required. Baseline conditions do not have any water demands, and No Federal Action/No Project Alternative related demands would represent a minimal and temporary increase over baseline conditions. These demands would, however, be less than the 14.3 and 9.8 acre feet demanded by proposed Project construction and operation, respectively. Because the UWMP addresses water supply for the City of Los Angeles, and because the Project site and the Port of Los Angeles are a part of the City, the UWMP accounts for the water usage of the No Federal Action/No Project Alternative. In addition, the UWMP is required to be updated every 5 years, thus water demand and supply planning would be continued. Based on efforts by the City for ongoing water demand and supply planning and management, the negligible incremental difference in water demand would not significantly affect water supplies or water distribution infrastructure.

Similarly, wastewater generations associated with the No Federal Action/No Project Alternative would also be minimal and only occur during construction of the site improvements because no employees would be present during operations, representing minimal and temporary increase over baseline conditions. No Federal Action/No Project Alternative wastewater generations would be less than proposed Project demands of 0.01 million gallons per day. The amount of wastewater generated by the No Federal Action/No Project Alternative would not significantly affect existing or future capacity at TITP due to the lack of operational flows and the substantial remaining capacity at TITP beyond 2020, as described previously. Therefore, impacts associated with exceeding the capacity of the existing water supply and the TITP wastewater treatment facility would be less than significant.

The No Federal Action/No Project Alternative would result in only negligible solid waste generations during site improvement construction activities because these activities (i.e., paving the site and installing an access road) would be minimal. No Federal Action/No Project Alternative construction would be substantially less than that of the proposed Project (i.e., because the No Federal Action/No Project Alternative does

not include construction of the Marine Terminal or Tank Farm sites. As no employees would be required under No Federal Action/No Project Alternative operations, operational activities (i.e., temporary storage of wheeled containers) would not generate any solid waste. No Federal Action/No Project Alternative solid waste generation during construction activities would represent minimal and temporary increases over baseline conditions, where generations are zero. Solid waste generations would be substantially less than proposed Project construction (5,524 tons) and operation (17.9 tons per year) generations because the No Federal Action/No Project Alternative does not include construction of the Marine Terminal or Tank Farm sites and does not include any employees. Impacts to the Chiquita Canyon Landfill, Sunshine Canyon Landfill, and El Sobrante Landfill would be less than significant.

Furthermore, as water demands and wastewater/solid waste generations are not substantially affected by vessel calls, the increased vessel trips at LAHD Berths 238-240 and Port of Long Beach Berths 76-78 and 84-87 would not impact utility services. In conclusion, the No Federal Action/No Project Alternative impacts to water supply, wastewater treatment capacities, and solid waste treatment capacities would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Because the No Federal Action/No Project Alternative is identical to the NEPA Baseline in this project, under NEPA the No Federal Action/No Project Alternative would have no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

Impact PS-5: Implementation of the No Federal Action/No Project Alternative would generate minor increases in energy demands; however, construction of new offsite energy supply facilities and distribution infrastructure would not be required.

CEQA Impact Determination

Energy (diesel fuel and electricity) would be required to support site improvement activities (i.e., paving the site and installing an access road) under the No Federal Action/No Project Alternative.

Energy demands during construction activities would be short-term and temporary, and are not anticipated to result in the substantial waste or inefficient use of energy as a result of the competitive bid process that facilitates cost effective strategies that support energy efficiency and conservation. No Federal Action/No Project Alternative operations would generate minimal demands for electricity associated with site lighting. The No Federal Action/No Project Alternative would have no natural gas demands (space and water heating) because administration buildings would not be included. As the project site is currently vacant, no energy demands are associated with baseline conditions. Energy demands associated with the No Federal Action/No Project Alternative would be less than the proposed Project because this alternative would not include the construction or operation of the Marine Terminal or Tank Farm sites.

Electricity would be provided by the LADWP. The LADWP has ample generation capacity to meet the needs of its customers and will continue to do so with proper planning and development of facilities in accordance with the City Charter. The LADWP electrical load is projected to grow at 1.1 percent per year over the next 20 years. Annual peak demand is projected to grow slightly slower, 1.0 percent per annum (Holloway, 2002). Based on the LADWP IRP, electricity resources and reserves at LADWP will adequately provide electricity for the No Federal Action/No Project Alternative. The IRP does not provide load demand forecasts or supply resources because the IRP planning horizon extends only to 2025 (City of Los Angeles, 2006b). However, because LADWP is required by the Charter to provide a reliable supply of electricity for its customers and because LADWP is moving toward increasing renewable energy supplies in its resource portfolio, the electricity demand of the No Federal Action/No Project Alternative, by itself, would not result in the need to construct a new offsite power station or facility.

Additionally, because utility demands, including energy, are not affected by vessel calls, assuming that vessels would not use AMP at other berths, and the increased vessel trips at LAHD Berths 238-240 and Port of Long Beach Berths 76-78 and 84-87 would not impact energy services. As the No Federal Action/No Project Alternative would provide new energy distribution infrastructure required to support proposed operations (i.e., lighting), and operations would not exceed existing supplies and/or result in the need for major new facilities, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Because the No Federal Action/No Project Alternative is identical to the NEPA Baseline in this project, under NEPA the No Federal Action/No Project Alternative would have no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

3.13.4.3.3 Reduced Project Alternative

Under the Reduced Project Alternative, as described in Section 2.5.2.2, construction and operation at Berth 408 would be identical to the proposed Project with the exception of the lease cap limiting throughput in certain years. However, as explained in Section 2.5.2.2, the lease cap would not change the amount of crude oil demanded in southern California, and therefore the analysis of the Reduced Project Alternative also includes the impacts of marine delivery of incremental crude oil deliveries to existing liquid bulk terminals in the San Pedro Bay Ports in years where demand exceeds the capacity of the lease-limited Berth 408.

As described in Section 2.5.2.2, the impact assessment for the Reduced Project Alternative also assumes existing terminals would eventually comply with the MOTEMS, that the LAHD and the Port of Long Beach would renew the operating leases for existing marine terminals, and that existing terminals would comply with CAAP measures as of the time of lease renewal (i.e., 2008 for Port of Long Beach Berths 84-87, 2015 for LAHD Berths 238-240, and 2023 for Port of Long Beach Berths 76-78).

Impact PS-1: The Reduced Project Alternative would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects.

CEQA Impact Determination

Reduced Project Alternative construction and operation would result in a slight increase in demands for Port Police and LAPD services. As the Port Police determines the demand for additional officers based on area, the demand generated under construction and operations would be equal. As shown in Table 3.13-1, the 53.2 acres under the Reduced Project Alternative would result in a demand for less than one (i.e., 0.059) new officer. CEQA Baseline conditions do not produce a demand for officers, so the Reduced Project Alternative related demands represent a total increase over baseline conditions. Additionally, Reduced Project Alternative construction demands are the same as those for the proposed Project because this alternative is identical to the proposed Project in terms of design and construction. Incorporation of MTSA security features, including terminal security personnel, gated entrances, perimeter fencing, terminal and backlands lighting, camera systems, and other security features, would reduce demand on police protection. Pursuant to the Public Services Relocation Plan, coordination with LAPD and Port Police to establish alternative response routes would ensure continuous law enforcement access to surrounding areas. The Reduced Project Alternative would not affect USCG response times as the USCG determines response time based on the distance that is required to travel to the various Port facilities, and the alternative would be located within the same

operating distance of other facilities within the jurisdiction of Sector Los Angeles and Long Beach. Although vessel calls would increase annually under operations, USCG staffing levels are adequate and daily calls are expected to remain the same. Furthermore, as USCG, LAFD, and Port Police services are not affected by vessel calls, the increased vessel trips at LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 would not impact these services. Consequently, the Reduced Project Alternative would not increase the demand for additional law enforcement officers and/or facilities such that the LAPD, Port Police, and USCG would not be able to maintain an adequate level of service without additional facilities. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

The Reduced Project Alternative would include development of a Marine Terminal and Tank Farm Sites, which would require a greater total site area compared to NEPA Baseline conditions; however, the associated increase in calls to the Port Police and LAPD would not substantially impact existing levels of service during proposed Reduced Project Alternative construction as this alternative includes security features consistent with MTSA regulations that would minimize the demand for police protection. The Reduced Project Alternative would result in a total area of 53.2 acres and a corresponding Port Police demand of less than one (i.e., 0.059) officer. This demand is slightly greater than the 0.012 officers required by the 10.7 acre temporary storage site under baseline conditions. The Reduced Project Alternative would be located within the same operating distance of other facilities served by the USCG and would therefore not increase emergency response times due to adequate staffing levels and the fact that, although vessel calls would increase annually, daily calls are expected to remain the same. Port Police, LAPD, and USCG demands resulting from the Reduced Project Alternative would be the same as the proposed Project because this alternative is identical to the proposed Project in terms of design, construction and operation. Furthermore, as USCG, LAFD, and Port Police services are not affected by vessel calls, the increased vessel trips at LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 would not impact these services. Accordingly, the Reduced Project Alternative would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects, and less than significant impacts would occur under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Impact PS-2: Development of the Reduced Project Alternative would not require the addition of a new fire station of the expansion, consolidation, or relocation of an existing facility to maintain service.

CEQA Impact Determination

The Reduced Project Alternative would not significantly affect fire protection services because it would not result in a land use change or unsafe site access that would jeopardize emergency response routes. Construction contractors would coordinate with LAFD pursuant to the Public Services Relocation Plan prior to commencement of construction activities to identify alternative response routes, ensuring continuous adequate fire and emergency vehicular access to the Reduced Project Alternative area and reducing impacts to a less than significant level. Any removal and/or relocation of fire hydrants, water supply trunk lines, and distribution mains in the Reduced Project Alternative area would be conducted in accordance with the proposed Public Services Relocation Plan, which is described in Section 2.4.3.5, and subject to review and approval by the LAFD and LADWP. Therefore, the Reduced Project Alternative construction would not impede emergency response services in the vicinity. As fire protection features, such as firewater mains and fire monitors, would be incorporated into the design process, the Reduced Project Alternative operations would not substantially increase the demand for fire protection services. Furthermore, the LAFD would be notified in advance and afforded the opportunity to review and comment on any Reduced Project Alternative features affecting emergency access. The Reduced Project Alternative operations would not significantly affect emergency response times as the site would have the same land use, no existing fire lanes or hydrants would be removed, and site access would be reviewed by the LAFD. The Reduced Project Alternative police protection demands would be the same as the proposed Project because this alternative is identical to the proposed Project in terms of design and construction. Furthermore, as LAFD services are not affected by vessel calls, the increased vessel trips at LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 under operations would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. As the Reduced Project Alternative construction and operations would not increase the demand for fire services to a degree that would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

The Reduced Project Alternative would include development of a Marine Terminal and two Tank Farm sites that would not be part of the NEPA Baseline. Reduced Project Alternative construction would have the potential to reduce response times where traffic detours or congestion results, thereby increasing LAFD emergency response times. However, construction contractors would coordinate with LAFD pursuant to the Public Services Relocation Plan prior to commencement of construction activities to identify alternative response routes, ensuring continuous adequate fire and emergency vehicular access to the Reduced Project Alternative area. As fire protection features, such as firewater mains and fire monitors, would be incorporated into the design process, Reduced Project Alternative operations would not substantially increase the demand for fire protection services. Furthermore, the LAFD would be notified in advance and afforded the opportunity to review and comment on any Reduced Project Alternative features affecting emergency access. However, these activities would not require removal and/or relocation of fire hydrants and utilities in the Reduced Project Alternative area. Reduced Project Alternative operations would not affect emergency response times as the site would have the same land use, no existing fire lanes or hydrants would be removed, and site access would be reviewed by the LAFD. Reduced Project Alternative fire protection demands would be the same as the proposed Project because this alternative is identical to the proposed Project in terms of design and construction. Furthermore, as LAFD services are not affected by vessel calls, the increased vessel trips at LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 under operations would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. Because the Reduced Project Alternative construction and operations would not increase the demand for fire services to a degree that would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service, less than significant impacts would occur under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Impact PS-3: The Reduced Project Alternative would not result in a substantial increase in utility demands; however, construction and/or expansion of onsite water, wastewater, or storm drain lines would be required to support new terminal development.

CEQA Impact Determination

As with the proposed Project, water demands associated with the Reduced Project Alternative would be minimal because this alternative would have limited building development and would lack water-consuming industrial or commercial processes. As shown in Table 3.13.2, the construction of the Reduced Project Alternative would result in a water demand that would represent 0.0021 percent of the LADWP water supply; proposed Project operation water demands would represent 0.0013 percent of the available water supply. Construction and/or expansion of onsite water lines would be

required to support new terminal development; however, the water mains serving the Project area and LADWP supplies have sufficient capacity to accommodate water required to support proposed Project operations.

As shown in Table 3.13-3, wastewater generated during Reduced Project Alternative construction would be 0.01 million gallons per day, and operational wastewater generation would be 0.007 million gallons per day. The TITP currently operates at 54 percent capacity. As there are no water demands or wastewater generations under CEQA Baseline conditions, all Reduced Project Alternative related demands and generations represent increases over baseline conditions. The City projects that by 2020, wastewater flows in the TITP service area will grow from the current 16.2 mgd (about 54 percent of TITP capacity) to 19.9 mgd (City of Los Angeles 2006b); therefore, approximately 10 mgd in daily capacity at TITP would remain unused and available for future years. As the generation of wastewater is not affected by vessel calls, the increased vessel trips to LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 under operations would not impact wastewater treatment facilities.

Trunk lines and distribution mains would need to be extended to direct water and wastewater to and from the new terminal facilities. As previously stated, the Port would prepare a Public Services Relocation Plan to address the public utilities that would be affected by proposed Reduced Project Alternative construction, which would be reviewed by the service providers and City departments prior to implementation. Because new utility lines would be located within exiting City streets or existing pipeline corridor easements, utility connections would comply with the City's municipal code, and would be performed under permit by the City Bureau of Engineering and/or LADWP. Modifications of or connections with utility lines would not result in significant environmental impacts. Therefore, impacts to public utility locations or alignments would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

As shown in Table 3.13-2, construction of the Reduced Project Alternative would result in a water demand that would represent 0.0021 percent of the available water supply; Reduced Project Alternative operational water demands would represent 0.0013percent of the available water supply. NEPA Baseline conditions would only have minimal water demands during site improvement construction and would not demand any water during operational activities. Construction and/or expansion of onsite water lines would be required to support new terminal development; however, the water mains serving the Project area and LADWP supplies have sufficient capacity to accommodate water required to support Reduced Project Alternative operations.

As shown in Table 3.13-3, Reduced Project Alternative construction would generate 0.01 million gallons of wastewater per day and operation would generate 0.007 million

gallons per day. Similar to water demands, NEPA Baseline conditions would only generate minimal wastewater during site improvements and would not generate any wastewater during operations as no employees would be present. As the generation of wastewater is not affected by vessel calls, the increased vessel trips to LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 under operations would not impact wastewater treatment facilities.

Reduced Project Alternative construction activities would not require the removal and relocation of water supply distribution mains and sewer trunk lines within the vicinity of the Reduced Project Alternative sites. Reduced Project Alternative water and wastewater demands, and impacts to water, wastewater, and storm drain infrastructure, would be the same as the proposed Project because this alternative is identical to the proposed Project in terms of design, construction and operation. As public utilities would not be affected by proposed Reduced Project Alternative construction or operational activities, adverse impacts associated with construction and/or expansion of water, wastewater, and storm drain infrastructure would not occur. Therefore, there would be less than significant impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Impact PS-4: The Reduced Project Alternative would not generate substantial water and/or wastewater demands that would exceed the capacity of existing facilities in the proposed Project area. The Reduced Project Alternative would generate substantial solid waste demands that could exceed capacities.

CEQA Impact Determination

The Reduced Project Alternative would not require a substantial amount of water or produce a substantial amount of wastewater. Table 3.13-2 demonstrates construction of the Reduced Project Alternative would result in a water demand of approximately 14.3 acre feet, or 0.0021 percent of the LADWP water supply of 683,000 acre feet in 2010. The Reduced Project Alternative would result in a water demand of approximately 8.728 gallons per day, or 9.8 acre feet per year at the full-capacity level of operation. This would represent 0.0013 percent of the projected available water supply of 755,000 acre feet in 2025. Because the UWMP addresses water supply for the City of Los Angeles, and because the Project site and the Port of Los Angeles are a part of the City, the UWMP accounts for the water usage of the Project. In addition, the UWMP is required to be updated every 5 years, thus water demand and supply planning would be continued. Based on efforts by the City for ongoing water demand and supply planning and management, the negligible incremental difference in water demand would not significantly affect water supplies or water distribution infrastructure.

As shown in Table 3.13-3, wastewater generated during Reduced Project Alternative construction would be 0.01 million gallons per day, or 0.08 percent of the existing flow

and 0.05 percent of TITP capacity. Operational wastewater generation would be 0.007 million gallons per day, or 0.04 percent of the existing flow and 0.02 percent of TITP capacity. The TITP currently operates at 54 percent capacity. The amount of wastewater generated by the Reduced Project Alternative would not significantly affect existing or future capacity at TITP due to the limited operational flows and the substantial remaining capacity at TITP beyond 2020, as described previously. Therefore, impacts associated with exceeding the capacity of the existing water supply and the TITP wastewater treatment facility would be less than significant.

As there are no water demands or wastewater generations under CEQA Baseline conditions, all Reduced Project Alternative related demands and generations represent increases over baseline conditions. The water demands and wastewater generations associated with the Reduced Project Alternative are the same as those for the proposed Project because this alternative is identical to the proposed Project in terms of design and construction. As water and wastewater demands are not affected by vessel calls, the increased vessel trips to LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 under operations would not impact water or wastewater service facilities.

The amount of solid waste generated by construction activities would total approximately 5,524 tons, which would be a substantial one-time contribution to the solid waste stream, possibly contributing to the exceedance of solid waste facility capacities. Because construction waste is one of the greatest individual contributors to reductions in solid waste capacity, impacts associated with solid waste generation from Reduced Project Alternative construction are assumed to be significant under CEQA.

Although hazardous materials could be encountered and require disposal during construction activities, several contaminated soil treatment and disposal options and Class I landfills are available for offsite disposal, providing adequate capacity. Because of this, impacts related to exceeding the capacity of a Class I landfill would be less than significant.

Reduced Project Alternative operations would generate 17.9 tons of solid waste per year, representing 0.000010 percent of the permitted daily capacity of 5,000 tons at Chiquita Canyon Landfill, 0.000011 percent of the permitted daily capacity of 5,500 at the Sunshine Canyon Landfill, or 0.00009 percent of the available permitted daily capacity at the El Sobrante Landfill. As no solid waste is generated under CEQA Baseline conditions, all Reduced Project Alternative construction and operation generations would represent an increase over baseline conditions. The solid waste generated under the Reduced Project Alternative would be equal to the proposed Project because, as previously described, this alternative is identical to the proposed Project in terms of design and construction. As solid waste generations are not affected by vessel calls, the increased vessel trips to LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 under operations would not impact solid waste facilities. Solid waste generated from Project operations after closure of the Chiquita Canyon Landfill, the Sunshine Canyon Landfill, and the El Sobrante Landfill (2030 and after) might represent a significant impact to landfill capacity if no new capacity were available and landfill demand remains constant. However, additional adequate landfill capacity is expected to be permitted and made available, including the utilization of more distant landfill capacity for solid waste generated in the City. Additionally, the achievement of Zero-Waste solutions in the City will reduce the overall need for landfill capacity. Thus, the

post-2030 solid waste generated by the Project would not represent a significant impact to landfill capacity.

In conclusion, the Reduced Project Alternative would result in less than significant impacts to water supply and wastewater treatment capacities; however, as solid waste generated during construction activities is one of the greatest individual contributors to solid waste capacity and would represent a substantial one-time contribution to the solid waste stream, impacts associated with solid waste generation during construction activities would be significant under CEQA.

Mitigation Measures

Although impacts on water supply would be less than significant, **MM 4N-1** from the Deep Draft FEIS/FEIR would apply. In addition, **MMs PS-1** through **PS-3** would apply to solid waste impacts associated with construction activities.

Residual Impacts

Impacts to water supply and wastewater treatment capacity would be less than significant. Implementation of **MMs PS-1** and **PS-2** would lessen Reduced Project Alternative construction related solid waste generation, ensuring less than significant impacts through approximately 2030 when existing landfills are projected to close. **MM PS-3** would ensure adequate long-term solid waste management for the proposed Project starting from 2025. Long-term impacts to solid waste disposal would be less than significant after mitigation.

NEPA Impact Determination

As discussed under **Impact PS-3**, the Reduced Project Alternative collectively constitutes negligible demands for water and wastewater supplies that would be accommodated by LADWP, onsite water supply sewer infrastructure, and existing TITP capacity. Construction of the Reduced Project Alternative would result in a water demand representing 0.0021 percent of the LADWP water supply, and operation would result in a water demand representing 0.0013 percent of the projected available water supply. Baseline condition demands and generations are minimal, and all Reduced Project Alternative related demands are considered an increase over baseline conditions. Because the UWMP addresses water supply for the City of Los Angeles, and because the Project site and the Port of Los Angeles are a part of the City, the UWMP accounts for the water usage of the Project. In addition, the UWMP is required to be updated every 5 years, thus water demand and supply planning would be continued. Based on efforts by the City for ongoing water demand and supply planning and management, the negligible incremental difference in water demand would not significantly affect water supplies or water distribution infrastructure.

Construction of the Reduced Project Alternative would result in a wastewater generation of 0.01 million gallons per day, and operational generations would be 0.007 million gallons per day. Reduced Project Alternative generated wastewater would constitute 0.05 percent of the TITP daily capacity during construction activities and 0.02 percent during operational activities. As the TITP currently operates at 54 percent capacity, these increases would be negligible. The amount of wastewater generated by the Project would not significantly affect existing or future capacity at TITP due to the limited

operational Project flows and the substantial remaining capacity at TITP beyond 2020, as described previously. Therefore, impacts associated with exceeding the capacity of the existing water supply and the TITP wastewater treatment facility would be less than significant.

Under baseline conditions, site improvements (i.e., paving the site and installing an access road) would result in minimal water demands and wastewater generations; there would be no demands or generations during operations. As baseline condition demands and generations are minimal, all Reduced Project Alternative related demands are considered an increase over baseline conditions. However, these increases would be negligible and would be accommodated by existing facilities. The water demands and wastewater generations associated with the Reduced Project Alternative are the same as those for the proposed Project because this alternative is identical to the proposed Project in terms of design and construction. As water and wastewater demands are not affected by vessel calls, the increased vessel trips to LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 under operations would not impact water or wastewater service facilities.

The amount of solid waste generated by construction activities would total approximately 5,524 tons, which would be a substantial one-time contribution to the solid waste stream, possibly contributing to the exceedance of solid waste facility capacities. Because construction waste is one of the greatest individual contributors to reductions in solid waste capacity, impacts associated with solid waste generation from Reduced Project Alternative construction are assumed to be significant under NEPA.

Although hazardous materials could be encountered and require disposal during construction activities, several contaminated soil treatment and disposal options and Class I landfills are available for offsite disposal, providing adequate capacity. Because of this, impacts related to exceeding the capacity of a Class I landfill would be less than significant.

The Reduced Project Alternative would generate 17.9 tons of solid waste per year during operations, representing 0.000010 percent of the permitted daily capacity of 5,000 tons at Chiquita Canyon Landfill, 0.000011 percent of the permitted daily capacity of 5,500 at the Sunshine Canyon Landfill, or 0.00009 percent of the available permitted daily capacity at the El Sobrante Landfill. Under baseline conditions, site improvements (i.e., paving the site and installing an access road) would result in minimal solid waste generation; there would be no demands or generations during operations. As baseline condition generations are minimal, all Reduced Project Alternative related generations are considered an increase over baseline conditions. Solid waste generated from Project operations after closure of the Chiquita Canyon Landfill, the Sunshine Canyon Landfill, and the El Sobrante Landfill (2030 and after) might represent a significant impact to landfill capacity if no new capacity were available and landfill demand remains constant. However, additional adequate landfill capacity is expected to be permitted and made available, including the utilization of more distant landfill capacity for solid waste generated in the City. Additionally, the achievement of Zero-Waste solutions in the City will reduce the overall need for landfill capacity. Thus, the post-2030 solid waste generated by the Project would not represent a significant impact to landfill capacity. The solid waste generated under the Reduced Project Alternative would be equal to the proposed Project because, as previously described, this alternative is identical to the proposed Project in terms of design, construction and operation.

In conclusion, impacts associated with exceeding the capacity of the existing water supply and the TITP wastewater treatment facility would be less than significant. However, as solid waste generated during construction activities is one of the greatest individual contributors to solid waste capacity and would represent a substantial one-time contribution to the solid waste stream, impacts associated with solid waste generation during construction activities would be potentially significant under NEPA.

Mitigation Measures

Although impacts on water supply would be less than significant, **MM 4N-1** from the Deep Draft FEIS/FEIR would apply. **MMs PS-1** through **PS-3** would apply to solid waste impacts associated with construction activities.

Residual Impacts

There would be less than significant impacts to water supply and wastewater treatment capacity. Implementation of **MMs PS-1** and **PS-2** would lessen Reduced Project Alternative construction related solid waste generation, ensuring less than significant impacts through approximately 2030 when existing landfills are projected to close. **MM PS-3** would ensure adequate long-term solid waste management for the Reduced Project Alternative starting from 2025. Long-term impacts to solid waste disposal would be less than significant after mitigation.

Impact PS-5: Implementation of the Reduced Project Alternative would generate minor increases in energy demands; however, construction of new offsite energy supply facilities and distribution infrastructure would not be require to support Reduced Project Alternative activities.

CEQA Impact Determination

Energy (diesel fuel and electricity) would be required to support proposed construction activities under the Reduced Project Alternative. Energy demands during construction activities would be short-term and temporary, and are not anticipated to result in the substantial waste or inefficient use of energy as a result of the competitive bid process that facilitates cost effective strategies that support energy efficiency and conservation throughout all construction stages. Reduced Project Alternative operations would generate demands for electricity associated with vessel-unloading operations, transfer of crude oil, AMP system usage (if AMP is used as a mitigation measure), site and security lighting, and general site maintenance. Reduced Project Alternative natural gas demands (space and water heating) would not be substantial because administration buildings represent a minor part of proposed terminal operations. Additionally, the Reduced Project Alternative would include three new buildings that would be built under the LEED Green Building Rating System in order to optimize energy efficiency. As the project site is currently vacant, no energy demands are associated with baseline conditions. Energy demands associated with the Reduced Project Alternative would be the same as for the proposed Project because this alternative is identical to the proposed Project in terms of design, construction, and operation.

Electricity would be provided by the LADWP. The LADWP has ample generation capacity to meet the needs of its customers and will continue to do so with proper planning and development of facilities in accordance with the City Charter. The

LADWP electrical load is projected to grow at 1.1 percent per year over the next 20 years. Annual peak demand is projected to grow slightly slower, 1.0 percent per annum (Holloway 2002). Based on the LADWP IRP, electricity resources and reserves at LADWP will adequately provide electricity for the Reduced Project Alternative. The IRP does not provide load demand forecasts or supply resources because the IRP planning horizon extends only to 2025 (City of Los Angeles 2006b). However, because LADWP is required by the Charter to provide a reliable supply of electricity for its customers and because LADWP is moving toward increasing renewable energy supplies in its resource portfolio, the electricity demand of the Reduced Project Alternative, by itself, would not result in the need to construct a new offsite power station or facility.

Additionally, utility demands, including energy, are not affected by vessel calls, and the increased vessel trips at LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 would not impact energy services. As the Reduced Project Alternative would provide new energy distribution infrastructure required to support proposed operations, and Berth 408 Terminal operations would not exceed existing supplies and/or result in the need for major new facilities, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impacts.

NEPA Impact Determination

The Reduced Project Alternative would include development of a Marine Terminal and two Tank Farm sites that would not be part of the NEPA Baseline. Energy demands during construction activities would be short-term and temporary, and are not anticipated to result in the substantial waste or inefficient use of energy as a result of the competitive bid process that facilitates cost effective strategies that support energy efficiency and conservation throughout all construction stages, as described above. Reduced Project Alternative operations would generate demands for electricity associated with vessel-unloading operations, transfer of crude oil, AMP system usage (if AMP is used as a mitigation measure), site and security lighting, and general site maintenance. Natural gas demands (space and water heating) would not be substantial because administration buildings represent a minor part of proposed terminal operations. Additionally, the Reduced Project Alternative would include three new buildings that would be built under the LEED Green Building Rating System in order to optimize energy efficiency. Reduced Project Alternative energy demands would be greater than those under baseline conditions because energy demands would be minimal during NEPA Baseline site improvements (i.e., paving the site and installation of an access road). Additionally, minimal energy would be demanded during baseline operation because the site would include lighting. Energy demands associated with the Reduced Project Alternative would be the same as for the proposed Project because this alternative is identical to the proposed Project in terms of design, construction, and operation.

Electricity would be provided by the LADWP. The LADWP has ample generation capacity to meet the needs of its customers and will continue to do so with proper planning and development of facilities in accordance with the City Charter. The LADWP electrical load is projected to grow at 1.1 percent per year over the next 20 years. Annual peak demand is projected to grow slightly slower, 1.0 percent per annum (Holloway 2002). Based on the LADWP IRP, electricity resources and reserves at LADWP will adequately provide electricity for the Reduced Project Alternative. The IRP does not provide load demand forecasts or supply resources because the IRP planning horizon extends only to 2025 (City of Los Angeles 2006b). However, because LADWP is required by the Charter to provide a reliable supply of electricity for its customers and because LADWP is moving toward increasing renewable energy supplies in its resource portfolio, the electricity demand of the Reduced Project Alternative, by itself, would not result in the need to construct a new offsite power station or facility.

Additionally, utility demands, including energy, are not affected by vessel calls, and the increased vessel trips at LAHD Berth 408 and 238-240 and Port of Long Beach Berths 76-78 and 84-87 would not impact energy services. As the Reduced Project Alternative would provide new energy distribution infrastructure required to support Reduced Project Alternative operations, and Berth 408 Terminal operations would not exceed existing supplies and/or result in the need for major new facilities. There would be less than significant impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

3.13.4.3.4 Summary of Impact Determinations

Table 3.13-5 summarizes the CEQA and NEPA impact determinations of the proposed Project and its alternatives related to Utilities and Public Services, as described in the detailed discussion in Sections 3.13.4.3.1 through 3.13.4.3.3. This table is meant to allow easy comparison between the potential impacts of the proposed Project and its alternatives with respect to this resource. Identified potential impacts may be based on Federal, State, or City of Los Angeles significance criteria, Port criteria, and the scientific judgment of the report preparers.

For each type of potential impact, the table describes the impact, notes the CEQA and NEPA impact determinations, describes any applicable mitigation measures, and notes the residual impacts (i.e.: the impact remaining after mitigation). All impacts, whether significant or not, are included in this table. Note that impact descriptions for each of the alternatives are the same as for the proposed Project, unless otherwise noted.

3.13.4.4 Mitigation Monitoring

Impact PS-4: The proposed Project would not generate substantial water and/or wastewater demands that would exceed the capacity of existing facilities in the proposed Project area. The proposed Project would generate substantial solid waste demands that could exceed capacities.	
MM 4N-1: Incorporate Water Conservation into Project Design	
Mitigation Measure	Water conservation devices and systems shall be incorporated into the proposed Project designs, including those required by the State of California Department of Water Resources. These include the following: 1. Any landscape plans shall emphasize a planting scheme that minimizes water irrigation requirements and shall use drought-resistant, native vegetation. 2. The proposed Project shall pursue the use of reclaimed water from the Terminal Island Treatment Plant for use in terminal operations. 3. The use of seawater for fire suppression shall be investigated.
Timing	Prior to building permit, during facility design.
Methodology	LAHD shall ensure that water conservation devices and systems are incorporated into facility designs.
Responsible Parties	Proposed Project applicant; LAHD.
MM PS-1: Recycling of Construction Materials	
Mitigation Measure	Demolition and/or excess construction materials shall be separated on-site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials shall be provided on-site.
Timing	Prior to and concurrent with proposed Project construction.
Methodology	The LAHD shall include **MM PS-1** in the contract specifications for construction. LAHD shall monitor implementation of mitigation measures during construction.
Responsible Parties	LAHD
Residual Impacts	Less than significant after mitigation.
MM PS-2: Materials with Recycled Content	
Mitigation Measure	Materials with recycled content shall be used in project construction. Chippers on site during construction shall be used to further reduce excess wood for landscaping cover.
Timing	Prior to and concurrent with proposed Project construction.
Methodology	The LAHD shall include **MM PS-2** in the contract specifications for construction. LAHD shall monitor implementation of mitigation measures during construction.
Responsible Parties	LAHD
Residual Impacts	Less than significant after mitigation.
MM PS-3: Solid Waste Integrated Resources Plan Compliance	
Mitigation Measure	To ensure adequate long-term solid waste management, the proposed Project will be required to comply with policies and standards set forth in the City's Solid Waste Integrated Resources Plan (SWIRP) following 2025.
Timing	Prior to and concurrent with proposed Project construction.
Methodology	The LAHD shall include **MM PS-3** in the contract specifications for construction. LAHD shall monitor implementation of mitigation measures during construction.
Responsible Parties	LAHD
Residual Impacts	Less than significant after mitigation.

3.13.5 Significant Unavoidable Impacts

No significant unavoidable impacts on utilities and public services would occur during construction or operation for the proposed Project or the alternatives

Table 3.13-5. Summary Matrix of Potential Impacts and Mitigation Measures for Utilities and Public Services Associated with the Proposed Project and Alternatives

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.13 Utilities and Public Services				
Proposed Project	**PS-1:** The proposed Project would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects.	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
	PS-2: Development of the proposed Project would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
	PS-3: The proposed Project would not result in a substantial increase in utility demands; however, construction and/or expansion of onsite water, wastewater, or storm drain lines would be required to support new terminal development.	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
	PS-4: The proposed Project would not generate substantial water and/or wastewater demands that would exceed the capacity of existing facilities in the proposed Project area. The proposed Project would generate substantial solid waste demands that could exceed capacities.	CEQA: Water Supply and Wastewater Treatment Capacity: Less than significant impact Solid Waste: **Significant** impact	**MM 4N-1:** Incorporate water conservation devices and systems into project design **MM PS-1:** Recycling of Construction Materials **MM PS-2:** Materials with Recycling Content **MM PS-3:** Solid Waste Integrated Resources Plan Compliance	CEQA: Less than significant impact

Table 3.13-5. Summary Matrix of Potential Impacts and Mitigation Measures for Utilities and Public Services Associated with the Proposed Project and Alternatives (continued)

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.13 Utilities and Public Services (continued)				
Proposed Project (continued)	**PS-4** (continued)	NEPA: Water Supply and Wastewater Treatment Capacity: Less than significant impact Solid Waste: **Significant** impact	**MM 4N-1** **MM PS-1** **MM PS-2** **MM PS-3**	NEPA: Less than significant impact
	PS-5: Implementation of the proposed Project would generate minor increases in energy demands; however, construction of new offsite energy supply facilities and distribution infrastructure would not be required to support proposed Project activities.	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
No Federal Action/No Project Alternative	**PS-1:** The No Federal Action/No Project Alternative would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects.	CEQA: Less than significant impact NEPA: No impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: No impact
	PS-2: The No Federal Action/No Project Alternative would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.	CEQA: Less than significant impact NEPA: No impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
	PS-3: The No Federal Action/No Project Alternative would not result in a substantial increase in utility demands and construction and/or expansion of onsite water, wastewater, or storm drain lines would not be required to support new terminal development.	CEQA: Less than significant impact NEPA: No impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: No impact
	PS-4: The No Federal Action/No Project Alternative would not generate substantial solid waste, water, and/or wastewater demands that would exceed the capacity of existing facilities in the proposed Project area.	CEQA: Less than significant impact NEPA: No impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: No impact

Table 3.13-5. Summary Matrix of Potential Impacts and Mitigation Measures for Utilities and Public Services Associated with the Proposed Project and Alternatives (continued)

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.13 Utilities and Public Services (continued)				
No Federal Action/No Project Alternative (continued)	**PS-5:** Implementation of the No Federal Action/No Project Alternative would generate minor increases in energy demands; however, construction of new offsite energy supply facilities and distribution infrastructure would not be required.	CEQA: Less than significant impact NEPA: No impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: No impact
Reduced Project Alternative	**PS-1:** The Reduced Project Alternative would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects.	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
	PS-2: Development of the Reduced Project Alternative would not require the addition of a new fire station of the expansion, consolidation, or relocation of an existing facility to maintain service.	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
	PS-3: The Reduced Project Alternative would not result in a substantial increase in utility demands; however, construction and/or expansion of onsite water, wastewater, or storm drain lines would be required to support new terminal development.	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
	PS-4: The Reduced Project Alternative would not generate substantial water and/or wastewater demands that would exceed the capacity of existing facilities in the proposed Project area. The Reduced Project Alternative would generate substantial solid waste demands that could exceed capacities.	CEQA: Water Supply and Wastewater Treatment Capacity: Less than significant impact Solid Waste: **Significant** impact NEPA: Water Supply and Wastewater Treatment Capacity: Less than significant impact Solid Waste: **Significant** impact	**MM 4N-1** **MM PS-1** **MM PS-2** **MM PS-3** **MM 4N-1** **MM PS-1** **MM PS-2** **MM PS-3**	CEQA: Less than significant impact NEPA: Less than significant impact

Table 3.13-5. Summary Matrix of Potential Impacts and Mitigation Measures for Utilities and Public Services Associated with the Proposed Project and Alternatives (continued)

Alternative	*Environmental Impacts*	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.13 Utilities and Public Services (continued)				
Reduced Project Alternative (continued)	**PS-5:** Implementation of the Reduced Project Alternative would generate minor increases in energy demands; however, construction of new offsite energy supply facilities and distribution infrastructure would not be require to support Reduced Project Alternative activities.	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact

This page intentionally left blank.