11.0 PUBLIC SERVICES AND UTILITIES

This chapter describes existing public services and utilities, and analyzes the project's potential effects on these resources that may occur with implementation of the proposed project. Additional related discussion is presented in Chapter 10.0: Hazards and Hazardous Materials.

Guidelines and key sources of data used in the preparation of this chapter include the following:

- Personal communications with service and utility providers
- City of Pittsburg General Plan
- Field observations (August and September 2011)
- City of Pittsburg *Urban Water Management Plan*

11.1 ENVIRONMENTAL SETTING

11.1.1 Regulatory Context

11.1.1.1 Federal Regulations

There are no federal regulations specifically applicable to the public services and utilities analyses in this Environmental Impact Report.

11.1.1.2 State Regulations

Uniform Fire Code

The Uniform Fire Code (UFC) contains regulations pertaining to the construction and maintenance of buildings and uses of the premises. Topics addressed in the UFC include fire hydrants, fire department access, fire alarm systems, fire and explosion hazard safety, industrial processes, and many other generalized and fire-specific safety requirements for new and existing buildings. UFC Standards is a companion publication to the Uniform Building Code (UBC) and contains standards of the American Society for Testing and Materials and of the National Fire Protection Association. The UBC is the primary guiding document that sets the standards for the built environment and is closely tied to the UFC to protect human life and safety. The UFC and UBC are widely accepted at the national level and adopted by individual states. California codes are nearly identical.

California Urban Water Management Planning Act

The California Urban Water Management Planning Act requires urban water suppliers to initiate planning strategies that make every effort to ensure the level of reliability in their water service is sufficient to meet the needs of their various categories of customers during normal, dry, and multiple dry-water years. The City of Pittsburg (City) would be the water supplier for the proposed project, and as such, the proposed project would be under the jurisdiction of the City's Urban Water Management Plan, prepared pursuant to the California Urban Water Management Planning Act, California Water Code, Sections 10610, *et seq*.

Senate Bill 610

Pursuant to California Water Code Section 10910, cities and counties acting as lead agencies request that water purveyors prepare water supply assessments (WSA) for certain projects (as defined in Water Code Section 10912) subject to the California Environmental Quality Act (CEQA). "Projects" under Senate Bill 610 are defined under Water Code Section 10912(a) as:

- a proposed residential development of more than 500 dwelling units;
- a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- a proposed hotel or motel, or both, having more than 500 rooms;
- a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- a mixed-use project that includes one or more of the projects specified in this subdivision; or
- a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

If a proposed project meets any one of these criteria, a WSA must be prepared. The primary issue that the WSA determines is whether the projected supply for the next 20 years—based on normal, single dry, and multiple dry-water years—would meet the demand projected for the project plus the existing and planned future uses, including agricultural and manufacturing uses.

The project as proposed would renovate existing infrastructure, and would not be considered "new" construction. In addition, the water usage during operation of the project would be essentially the same as it is now, which does not significantly tax existing water supplies. Therefore, a WSA is not required for the proposed project.

California Integrated Waste Management Act

In 1989, Assembly Bill 939 (AB 939), known as the Integrated Waste Management Act, was passed into law. The enactment of AB 939 established the California Integrated Waste Management Board (CIWMB), and set forth aggressive solid waste diversion requirements. Under AB 939, every city and county in California was required to reduce the volume of waste sent to landfills by 50 percent through recycling, reuse, composting, and by other means. In July 2009, Senate Bill 63 was chaptered into law eliminating the CIWMB effective January 1, 2010. All CIWMB duties and responsibilities have been transferred to the new Department of Resources Recycling and Recovery (CalRecycle), under the Natural Resources Agency.

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. Assembly Bill 818 regulations govern the transfer, receipt, storage, and loading of recyclable materials at the marine and storage terminal.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility service at reasonable rates; protecting utility customers from fraud; and promoting the health of California's economy. The CPUC establishes service standards and safety rules, authorizes utility rate changes, and enforces CEQA for utility construction. The CPUC works with other State and federal agencies in promoting water quality, environmental protection, and safety.

California Building Standards Code

California Code of Regulations, Title 24, Part 6, also known as the California Building Standards Code, describes California's energy-efficiency 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, alterations, and, in non-residential buildings, repairs.

11.1.1.3 Local Regulations

City of Pittsburg General Plan

The Public Facilities Element of the *City of Pittsburg General Plan* (2004) includes goals and policies for fire protection, water supply and distribution, wastewater collection and treatment, and solid waste.

The relevant goals and policies for fire protection include:

Goals: Fire Protection

2-G-8 Require development in areas of high fire hazard to be designed and constructed to minimize potential losses and maximize the ability of fire personnel to suppress fire incidents.

Policies: Fire Protection

2-P-25 Review and amend ordinances that regulate development in potentially hazardous locations to require adequate protection such as fire-resistant roofing, building materials, and landscaping.

The relevant goals and policies for water supply and distribution include:

Goals: Water Supply and Distribution

- 2-G-1 Available water supply and distribution capacity should grow proportionally with development patterns and water usage trends. Update the City's Water Master Plan to implement general plan growth projections.
- 2-G-2 Continue to implement water conservation policies to ensure adequate supplies of water in the future.

Policies: Water Supply and Distribution

- 2-P-3 Continue water district and user conservation efforts to help reduce demand in light of recent Contra Costa Water District raw water reductions.
- 2-P-6 Continue water conservation efforts from industrial facilities.
- 2-P-7 Ensure that new residential, commercial, and industrial development equitably shares costs associated with providing water services to areas of urban expansion within the planning area.

2-P-10 Cooperate with federal agencies to ensure that new development requiring inclusion in the Contra Costa Water District Central Valley Project contract service area addresses all requirements of federal statutes and regulations, including the National Environmental Policy Act and Endangered Species Act. Encourage project developers to provide all required information for consultation purposes, if necessary, under Endangered Species Act Sections 7 or 10, or a habitat conservation plan.

The relevant goals and policies for wastewater collection and treatment include:

Goals: Wastewater Collection and Treatment

- 2-G-3 Plan for expansion of the City's wastewater collection system, in order to provide necessary infrastructure for projected urban growth through 2020.
- 2-G-4 Maintain environmentally appropriate wastewater management practices.
- 2-G-5 Reduce rainfall-dependent infiltration and inflow, in order to maintain the capacity of the existing collection system, and prevent Sanitary Sewer Overflows.

Policies: Wastewater Collection and Treatment

- 2-P-16 Work with the Delta Diablo Sanitation District to ensure that industrial discharge is monitored and that wastewater quality continues to meet various federal, State, and regional standards.
- 2-P-17 Require that all wastewater discharges within the City conform to the ordinances of the Delta Diablo Sanitation District.
- 2-P-18 Ensure that new residential, commercial, and industrial development equitably share costs associated with providing wastewater services to areas of urban expansion within the planning area.

The relevant goals and policies for solid waste include:

Goals: Solid Waste

- 2-G-6 Continue reduction and recycling efforts within the City to divert increasingly larger portions of the waste stream from local landfills.
- 2-G-7 Manage solid waste so that State diversion goals are met.

Policies: Solid Waste

- 2-P-21 Promote the importance of recycling industrial and construction wastes.
- 2-P-23 Encourage builders to incorporate interior and exterior storage areas for recyclables into new or remodeled residential, commercial, and industrial structures.

The relevant goals and policies for public utilities include:

Goals: Public Utilities

- 2-G-9 Assess the adequacy of public utilities in existing developed areas, and program needed improvements to coordinate with developing portions of the planning area.
- 2-G-10 Encourage buffer landscaping and multi-use of utility sites and rights-of-way to harmonize with adjoining uses.

Policies: Public Utilities

2-P-33 As a condition of approval ensure that all new and redevelopment projects underground utility lines on and adjacent to the site.

The Growth Management Element of the *City of Pittsburg General Plan* (2004) includes goals and policies for growth and expansion. The relevant goal and policy for growth and expansion are:

Goals: Growth and Expansion

3-G-1 Manage the City's growth to balance development of housing options and job opportunities, protection of open space and habitat areas, construction of transportation improvements, and preservation of high-quality public facilities.

Policies: Growth and Expansion

3-P-1 Allow urban and suburban development only in areas where public facilities and infrastructure (police, fire, parks, water, sewer, storm drainage, and community facilities) are available.

Prior to development approval, public service agencies and/or districts should be contacted and assurance gained that areas of urban expansion will have all necessary infrastructure.

Urban Water Management Plan

The City of Pittsburg finalized the 2010 Urban Water Management Plan update in August 2011. The City is required to update its Urban Water Management Plan (UWMP) every five years per State law. The UWMP documents the City's plans to ensure adequate water supplies to meet existing and future demands for water under a range of water-supply conditions, including water shortages. The 2010 UWMP also includes plans for compliance with the Water Conservation Bill of 2009 (also referred to as SBX7-7), which sets a goal of achieving a statewide 20 percent reduction in urban per capita water use by the year 2020.

11.1.2 Existing Conditions

11.1.2.1 Public Services

Fire Protection and Emergency Response

The Contra Costa County Fire Protection District (CCCFPD) provides fire suppression, paramedic emergency medical services, technical rescue, water rescue, and fire prevention/investigation services within the City of Pittsburg. The CCCFPD operates 30 fire stations and responds to approximately 45,000 incidents annually. Fire Station 84 within Battalion 8 is located at 1903 Railroad Avenue, approximately 1.3 miles from the proposed WesPac Energy-Pittsburg Terminal (Terminal) and 1.1 miles from the proposed Rail Transload Operations Facility (Rail Transload Facility), and provides primary response for incidents within the project area. The response time goal for the CCCFPD is to provide service within five minutes of notification. Generally, service can be provided in this timeframe to areas within 1.5 miles of a fire station. The Terminal and the proposed Rail Transload Facility project sites are both within the 1.5-mile response area of Station 84.

The CCCFPD Operations Division (Division) provides "all risk" emergency services in the City, which includes emergency response to hazardous materials spills, leaks, and releases at fixed facilities, and special operations response to marine fires and emergencies. The Division staffs a total of 24 engine companies, 6 truck companies, and a shift training captain/safety officer daily across its 28 fully staffed stations, and it has 2 more stations staffed with reserve firefighters. Minimum daily staffing is 95 personnel. The 30 on-duty companies are trained and regularly cross-staff numerous specialty-response units, including three rescue units, a trench rescue unit, a fire rescue boat, and a mobile breathing air support unit.

The CCCFPD also maintains mutual-aid agreements with the East Diablo Fire Protection District, East Bay Regional Park District, California Department of Forestry, and private industrial companies located within its jurisdiction. These agreements provide the CCCFPD with emergency response assistance on an asneeded basis.

The CCCFPD operates a countywide early warning system for industrial fires. Called the Community Warning System, sirens installed at industrial facilities automatically sound when an incident occurs. The system alerts residents via television and radio announcements. See Chapter 10.0: Hazards and Hazardous Materials for more detail about the Community Warning System.

There is an existing fire protection system at the Terminal project site that is currently shared with the adjacent NRG Energy, Inc. (NRG) Pittsburg Generating Station. An existing intake structure, which serves as the water source for the existing tank fire protection system, is located near the northeast corner of the

Pittsburg Generating Station, and the water is pulled from the Sacramento-San Joaquin River.

Police Protection

NRG currently provides on-site personnel at the facility guard gate and remote cameras that provide video surveillance within the fenced area of the project site. Police protection services are provided by the Pittsburg Police Department and the Contra Costa Sheriff's Department. The nearest police station is located at 65 Civic Avenue, approximately 1 mile southeast of the proposed Terminal project site and approximately 0.7 mile south of the proposed Rail Transload Facility project site. The patrol division of the police department operates 24 hours a day. Typically, eight officers are on duty throughout the day. Pittsburg is broken into beats for deployment purposes and patrol officers are the first responders to the public for calls for service. Law enforcement response times for emergency calls are between 30 seconds and 3 minutes, depending on the location of the officer dispatched (URS Corporation, 2006).

Medical Facilities

The closest hospitals to the project site are the Sutter Delta Medical Center in the City of Antioch, which provides emergency services and is approximately 6.8 miles from the Terminal project site and approximately 7.2 miles from the proposed Rail Transload Facility project site; and the John Muir Medical Center in the City of Concord, a 259-bed acute care facility that is approximately 11.5 miles from the Terminal project site and approximately 10.5 miles from the Rail Transload Facility project site.

Educational Services and Facilities

The project is within the Pittsburg Unified School District, which serves more than 9,800 students in Kindergarten through 12th grade. The school district is comprised of eight elementary schools, two middle schools, one comprehensive high school, one continuation high school, adult education, and preschool services. St. Peter Martyr School, a private school that provides preschool, Kindergarten, and grades 1 through 8, is approximately 119 feet from the Terminal project site, within the residential area to the east of the project site. Marina Vista Elementary School is the next closest school, approximately 0.5 mile east of the Terminal project site. Parkside Elementary School is the closest school to the proposed Rail Transload Facility project site, approximately 0.25 mile to the south.

11.1.2.2 Utilities

Water Services

The City of Pittsburg Utilities and Facilities Division owns and operates the Pittsburg Water Treatment Plant (PWTP) and associated infrastructure facilities,

which primarily serves customers within the City limits. Treated water is distributed throughout Pittsburg via a 122-mile pipeline system, in addition to several pump stations and seven reservoirs. The PWTP currently operates at a peak rate of approximately 22 million gallons per day (mgd). It has a hydraulic design capacity of 32 mgd but is permitted by the California Department of Public Health for 28 mgd when water temperature is less than 68 degrees Fahrenheit, which usually occurs between November and April (City of Pittsburg, 2010a; LAFCO, 2007). This design capacity is sufficient to meet the 2020 maximum day requirements of 30.5 mgd (City of Pittsburg, 2004).

The City obtains approximately 90 percent of its untreated water supply from the Contra Costa Water District (CCWD) through the U.S. Bureau of Reclamation (USBR) Central Valley Project (CVP) (LAFCO, 2007). The untreated water is conveyed to Pittsburg through the Contra Costa Canal. The CCWD's primary source of water is the Sacramento-San Joaquin Delta. CCWD water is drawn from Rock Slough near Oakley, Old River near the town of Discovery Bay, and Mallard Slough in Bay Point.

The CCWD's long-term CVP contract was renewed in May 2005 for a 40-year term. The contract provides for a maximum delivery of 195,000 acre-feet per year (AF/Yr), with delivery reductions during water shortages due to regulatory restrictions and drought. The Municipal and Industrial Water Shortage Policy was developed by the USBR to establish CVP water-supply levels that would sustain urban areas during severe or continuing droughts. The policy provides for a minimum allocation of 75 percent of adjusted historical use until irrigation allocations fall below 25 percent. The CCWD's future supply projections indicate adequate availability of surface water sources delivered through its contract with the USBR, along with other available sources and short-term purchases under normal conditions (City of Pittsburg, 2005).

The City also supplements its CCWD water supply with two wells located at City Park, and at Dover Way and Frontage Road. The combined yield of both wells in Pittsburg is 1,500 AF/Yr (City of Pittsburg, 2004; LAFCO, 2007).

In 1996, the CCWD completed the Future Water Supply Study (FWSS) to identify alternatives to ensure a reliable water supply for its wholesale and retail customers for the next 50 years, which provides drought-management strategies such as enhanced conservation, water transfers, and increased use of local resources. The FWSS was updated in 2002. The FWSS, adopted by the CCWD Board of Directors, considers water demand, conservation, and existing and potential supplies for a range of service alternatives. Per the CCWD's adopted 2005 Urban Water Management Plan and the City of Pittsburg's 2010 Urban Water Management Plan, the CCWD does not anticipate any supply deficits through 2030 for normal conditions or single-year droughts, and for the first year of multiple-year droughts (City of Pittsburg, 2010b; LAFCO, 2007).

For planning purposes, the City estimates water demand at approximately 18.7 mgd, established by the City's *Water System Master Plan Final Draft* (2010). Per the City's *2010 Urban Water Management Plan*, approximately 70 percent of water use is for residential accounts, with commercial, governmental, institutional, and industrial uses accounting for less than 30 percent of the City's water use.

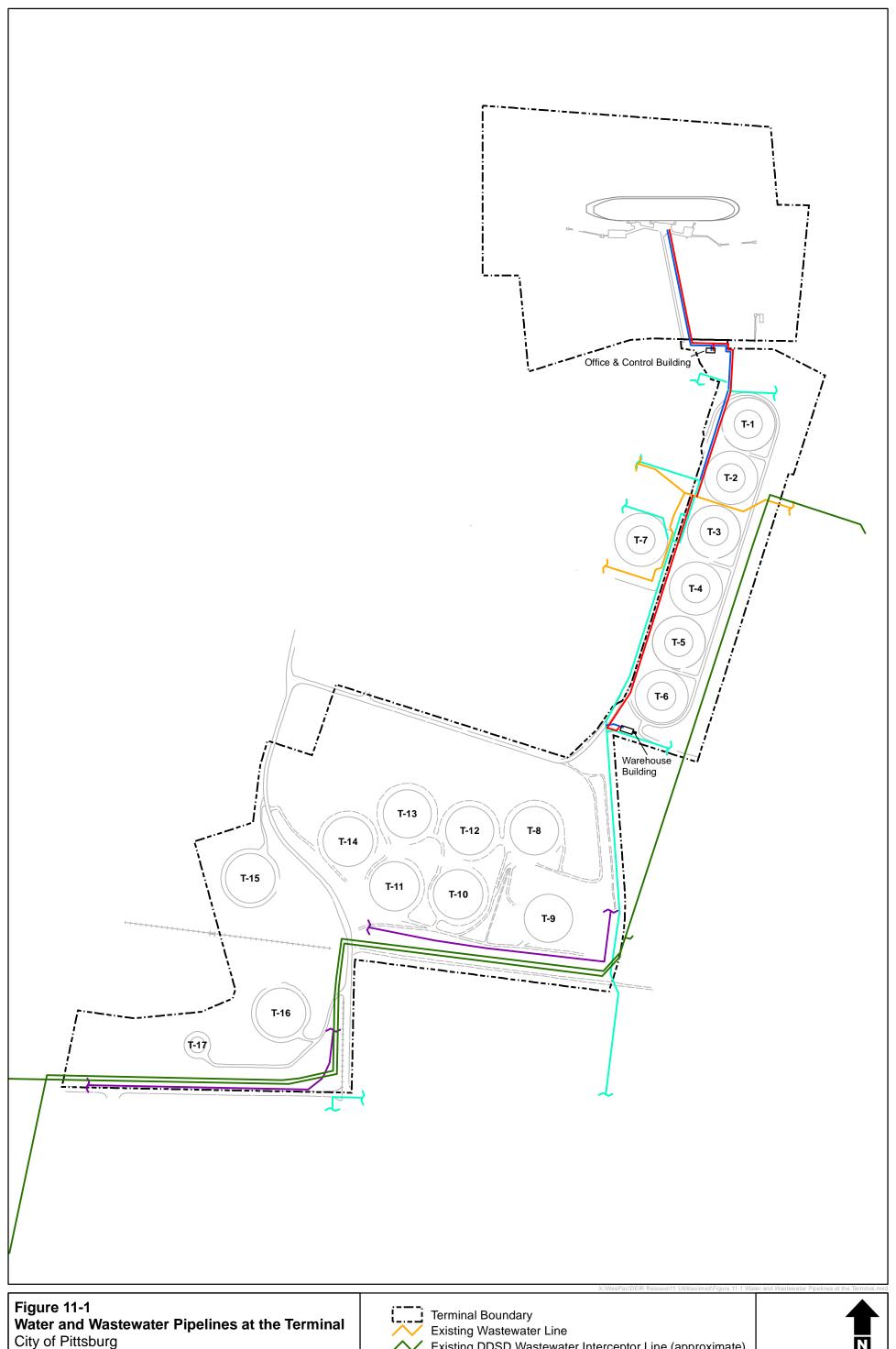
The City's water use for 2010 was 7,784 acre-feet (AF), which was a 13 percent reduction from the 2005 water use of 8,969 AF. The UWMP projects water demand and supplies through 2035. Total City of Pittsburg demand for water is predicted to be 9,461 AF in 2015 and 12,743 AF in 2035. The City's demand projections are based on 2010 actual use, escalated assuming a 6 percent annual increase in 2011 and 2012, a 5 percent annual increase in 2013, and 1.5 percent annual increases thereafter. Projected water supplies are 11,213 AF in 2015 and 14,974 AF in 2035 (City of Pittsburg, 2010b).

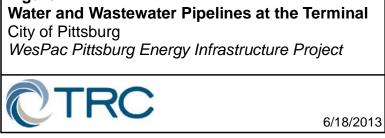
An existing City of Pittsburg underground potable water pipeline runs along West 10^{th} Street, and there is an existing meter connection just west of the intersection of Beacon Street and West 10^{th} Street. An existing underground water pipeline runs north on Beacon Street from the existing meter connection, then runs along the eastern edge of the South Tank Farm. North of the South Tank Farm the pipeline runs along the access road west of Tanks 2 through 6, turns west, and terminates at the existing NRG office facilities. Figure 11-1: Water and Wastewater Pipelines at the Terminal shows existing water pipelines at the project site. There are no existing water pipelines at the proposed Rail Transload Facility project site.

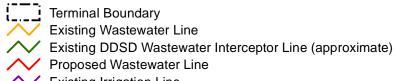
Wastewater Infrastructure

Sewer services are provided by the City and the Delta Diablo Sanitation District (DDSD). The City of Pittsburg Utilities and Facilities Division maintains and owns the local sewage-collection system, and the DDSD owns and operates regional interceptors and the sewage treatment plant located north of the Pittsburg-Antioch Highway. The City's collection system consists of approximately 126 miles of sewer lines ranging in diameter from 6 to 36 inches, and one sewage lift station. Sewer lines serving residential, commercial, and industrial development north of State Route 4, which includes the proposed project area, drain to the DDSD's Pittsburg Pump Station, located adjacent to the Terminal site, east of Tank 9.

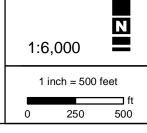
Wastewater flow projections are based on the number of residential units and commercial and industrial acreage estimated at build out of the general plan. The City's Collection System Master Plan (1990) identifies the wastewater flow unit factors used for the projection. Residential units are projected to generate 5.8 mgd, while commercial and industrial users are projected at 1.7 mgd (City of Pittsburg, 2004). The DDSD treatment plant has the capacity to treat







Existing Irrigation Line Existing Potable Water Line Proposed Potable Water Line



approximately 16.5 mgd of sewage and in 2011 the plant treated an average of 13.2 mgd. National Pollutant Discharge Elimination System No. CA0038547, Order No. R2-2009-0018, adopted by the Regional Water Quality Control Board, San Francisco Bay Region on March 9, 2009, cites the DDSD's intent to increase permitted flows from 16.5 mgd to 22.7 mgd (average dry-weather flow). The DDSD prepared an Environmental Impact Report (EIR) in 1988 that addresses expansion of its secondary capacity to 22.7 mgd, titled: "Delta Diablo Sanitation District Wastewater Facility Expansion Environmental Impact Report." The Final EIR was adopted by the DDSD's Board of Directors in 1988.

The City uses a number of plans to ensure that utility services are delivered in an efficient, cost-effective manner, including the *Water System Master Plan Final Draft* (2010), Wastewater Collection System Master Plan (2003) and Amendments (May 2006 and February 2007), Capital Improvement Program, and the Public Facilities Element of the City's general plan (2004). The City incorporates service goals into the bi-annual budget such as constructing new wells, implementing the Vulnerability Assessment recommendations for security upgrades to the PWTP, reducing sewer system overflows, and improving response times. Policies and procedures are in place to ensure that the existing system is maintained and that adequate facilities will be available to serve approved development projects (LAFCO, 2007).

The DDSD has regional wastewater easements adjacent to the Terminal project site, including east of Tanks 2 through 6, which runs adjacent to the project site to the pump station east of Tank 9. The City of Pittsburg also has wastewater easements adjacent to the project site. An existing 8-inch-diameter wastewater line runs between Tanks 2 and 3 and connects the NRG facility with an existing 12-inch-diameter line that runs parallel to the East Tank Farm outside the property boundary. Figure 11-1 shows existing wastewater pipelines at the project site.

An existing DDSD wastewater pipeline enters the proposed Rail Transload Facility site at the southeast corner via Leslie Drive, where it then follows the southern parcel boundary for approximately 700 feet. The pipeline then turns north across the project site to Charleston Street, behind some residences, and along Preservation Street (see Figure 11-2: Utilities at the Rail Transload Facility).

Storm Drainage

The City of Pittsburg Utilities and Facilities Division maintains the City's stormwater collection system. The City's curbs and gutters are part of the storm drain system, and existing City storm drains are located along West 10th Street and adjacent to the project site near Tank 9.

The Terminal project site does not currently connect to the City's storm drain system. Rather, there is an existing stormwater retention basin on the property

along the north side of the South Tank Farm, which collects stormwater from the South Tank Farm. An existing, smaller north retention pond collects stormwater from the East Tank Farm before being transferred to the main stormwater retention basin via existing pipelines. Stormwater in the retention basin is discharged to Willow Creek via the existing NRG outfall. Refer to Chapter 2.0: Proposed Project and Alternatives for a more detailed description of the on-site stormwater drainage system.

Solid Waste Disposal and Landfill Capacity

Solid waste pickup and disposal for the City of Pittsburg is provided by Pittsburg Disposal Services. Residential and commercial solid waste is disposed of at Potrero Hills Landfill in Suisun City, while nonrecyclable industrial waste is transported to Keller Canyon Landfill, located at 901 Bailey Road in Pittsburg. Contra Costa Waste Service (also referred to as the Recycling Center & Transfer Station) at 1300 Loveridge Road in Pittsburg accepts and recycles a variety of construction debris.

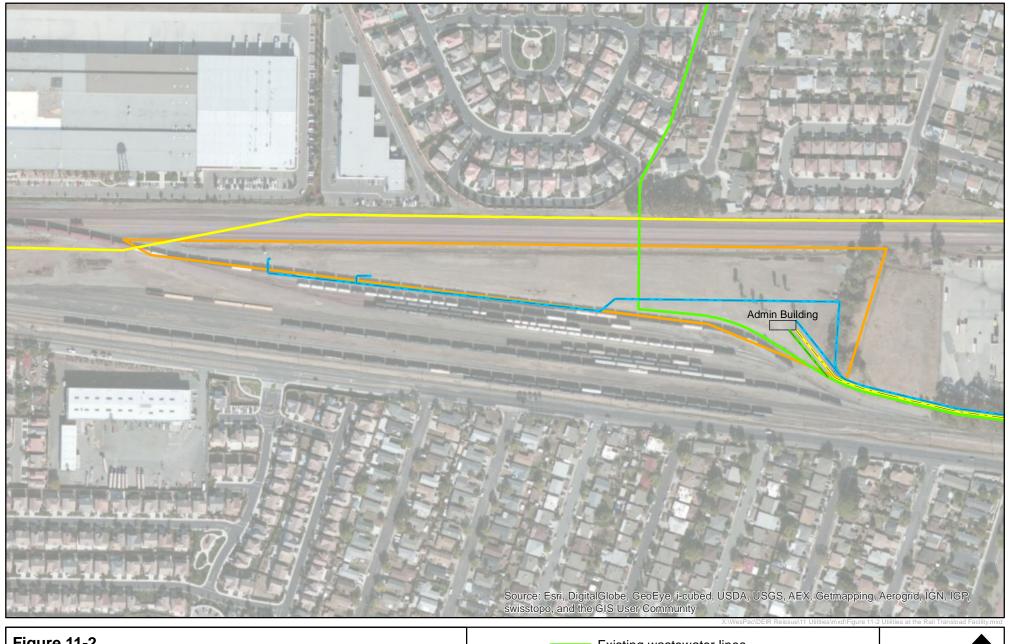
Keller Canyon Landfill services the eastern and central portions of Contra Costa County. A Class II facility, it opened in 1990 and has a projected lifespan of 40 years. The facility accepts municipal solid waste, non-liquid industrial waste, contaminated soils, ash, grit, and sludges. The landfill is closed to the public. Keller Canyon Landfill covers 2,600 acres of land; of the 244 acres permitted for disposal, 40 acres are currently in use. The site currently handles 2,500 tons of waste per day, although the permit allows up to 3,500 tons of waste per day to be managed at the facility (Allied Waste, 2011).

Natural Gas and Electricity

Natural gas and electric service in the proposed project area is provided by Pacific Gas and Electric Company (PG&E), which provides natural gas and electricity to approximately 15 million people throughout a 70,000-square-mile service area in northern and central California (PG&E, 2011).

There is an existing 24-inch-diameter natural gas pipeline outside of the project boundary east of the South Tank Farm, which terminates at the existing PG&E gas meter station in the South Tank Farm. An existing 30-inch-diameter natural gas line leaves the PG&E gas meter station and runs north to the PG&E Switchyard.

Five high-voltage overhead transmission lines cross the proposed project site in a northeast direction and terminate at the PG&E Switchyard. Four of the lines cross the stormwater retention pond, and one crosses over the existing PG&E gas meter station. There is also a distribution line that runs north along the entrance road to the facility, veers left following the access road around the South Tank Farm, and







Existing wastewater lines
Proposed wastewater lines
Existing power lines
Proposed electrical duct bank
Proposed water lines
Rail Transload Facility



1 inch = 300 feet

125

6/21/2013

terminates at the PG&E Switchyard. Another overhead powerline runs along the eastern side of the South Tank Farm at the property boundary, and then crosses the access road between the South and East tank farms, terminating at the PG&E Switchyard (see Figure 11-3: Gas Pipelines and Electric Power Lines at the Terminal).

Existing underground electric conduit on the property consists of parallel AC and DC cables (part of the Transbay Project) that run north onto the project site south of Tank 10, veer west along the existing access road, and follow the access road past the PG&E gas meter station toward the NRG facility (see Figure 11-3).

There are no existing natural gas pipelines on the proposed Rail Transload Facility project site. An existing overhead electric power line runs in an east-west direction between the existing BNFS tracks and the residences to the north, and cuts across the western end of the project site (refer to Figure 11-2).

11.2 IMPACT ANALYSIS

11.2.1 Methodology for Impact Analysis

Potential effects on public services were determined by identifying existing services and considering the potential for interference with, or increased requirements for, such services that would occur as a result of project construction and/or operation. Assessment of the proposed project impacts on utilities (water, wastewater [sewer], storm drainage, and 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.

11.2.2 Significance Criteria

For the purposes of this analysis, an impact was considered to be significant and to require mitigation if it would result in any of the following:

- Result in substantial adverse impacts to levels of service for public services, including fire response, police protection, medical facilities, and schools
- Result in noncompliance with required fire response distances or response times applicable to the project
- Require or result in the construction of new water, wastewater, or stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Require new or expanded entitlements for water supply

- Result in a determination by the wastewater treatment provider that serves, or may serve, the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- Require new solid waste facilities
- Result in substantial adverse impacts to public utilities, including wastewater treatment, water supply, or electricity and gas

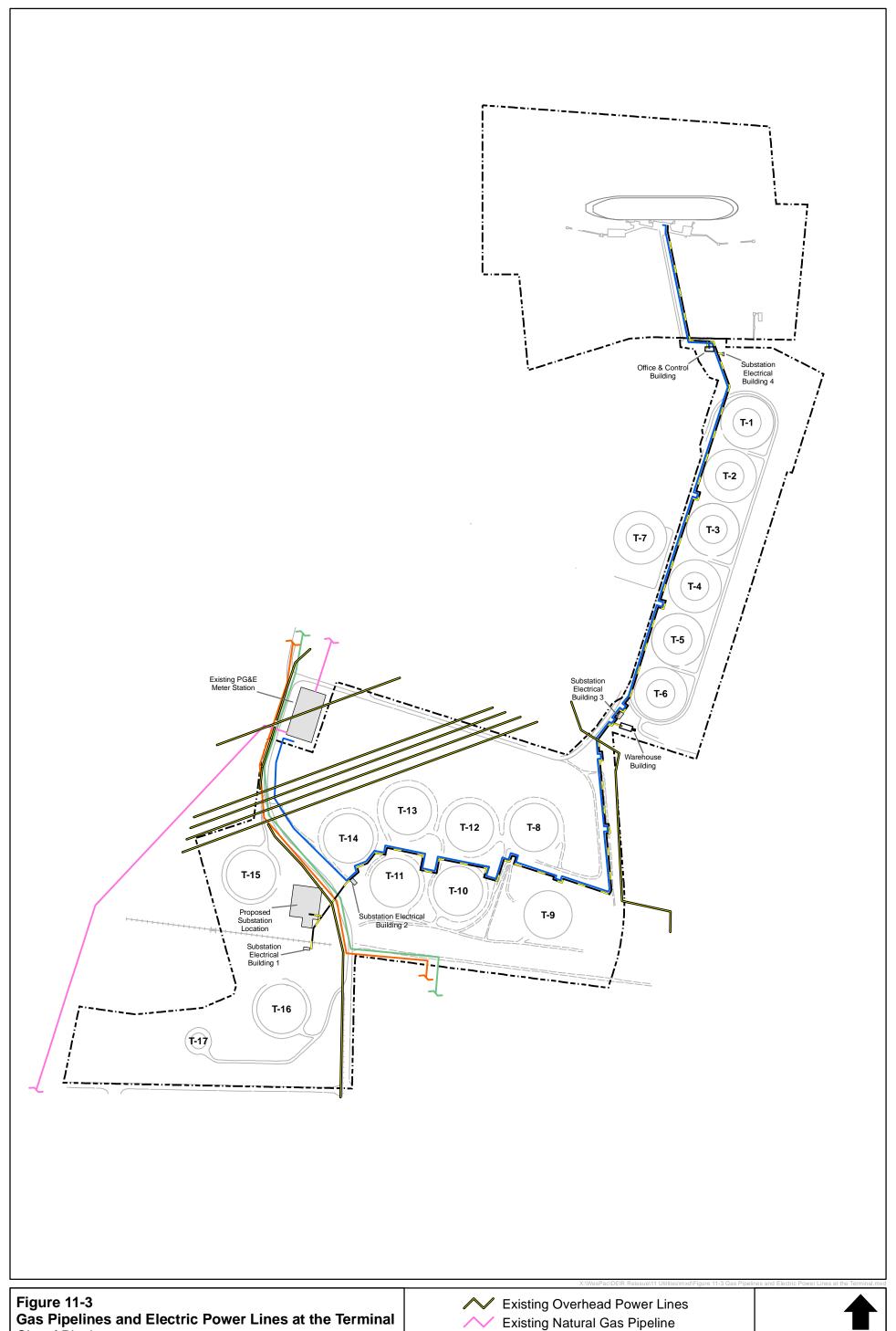
11.2.3 Impacts and Mitigation Measures

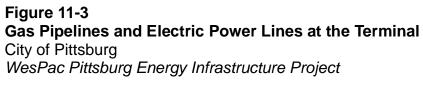
11.2.3.1 Proposed Project

Construction-related Impacts

Impact Public Services and Utilities (PSU)-1: Substantial adverse impacts to levels of service for public services. (Less than significant.) Construction activities are not expected to increase the need for fire or police protection services. The CCCFPD has indicated that it is capable of handling fires occurring as a result of spills at the project site, and that if it did need help the local Petro-Chemical Mutual Aid Organization (PMAO) would be called to assist. Lane closures may be required on streets adjacent to Railroad Avenue during construction of the proposed Rail Transload Facility. However, a lane would remain open for emergency vehicles to pass. Short-term construction employees would be local contractors who generally live within 20 to 30 miles of the project site; therefore, construction would not generate demand for new schools or hospitals as a result of induced growth or population migration. A Health and Safety Plan would be developed for project construction, which would include a Fire Hazard Management Plan. Standard best management practices would be included in the Fire Hazard Management Plan, including issuance of hot work permits prior to work such as grinding, welding, or torch cutting; using safety fire watches as required by the Occupational Safety and Health Administration (OSHA); and ensuring that all contractors wear the minimum required personal protective equipment (Environmental Commitment PSU-1; refer to Chapter 2.0: Proposed Project and Alternatives). Impacts to levels of service for public services would be less than significant.

Mitigation Measure: No mitigation required.

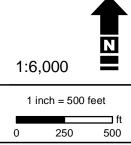




6/18/2013



Proposed Natural Gas Pipeline Existing Underground AC Cable Existing Underground DC Cable Proposed Electric Conduit Terminal Boundary



Impact PSU-2: Result in noncompliance with required fire response distances or response times applicable to the project. (Less than significant.) As discussed in Section 11.1.2.1, the response time goal for the CCCFPD is to provide service within five minutes of notification. Generally, service can be provided in this timeframe to areas located within 1.5 miles of a fire station, and the project sites are within the 1.5-mile response area of Station 84. Therefore, impacts to fire response distance or response times would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-3: Construction of new water, wastewater, or stormwater drainage facilities, or expansion of existing facilities. (Less than significant.) The project would involve the construction of new potable water and wastewater (sewer) pipelines to the proposed office and control building to be located between Tank 1 and the marine terminal, and to the marine terminal platform for a lavatory facility and a safety shower, as required by OSHA standards. A short water pipeline connection also would be needed at the warehouse building, southwest of Tank 6. New water pipelines and meter connections would be installed from the existing meter location just west of the intersection of Beacon Street and West 10th Street, and routed to the proposed office and control building, marine terminal, and warehouse building. Refer to Figure 11-1 for the locations of the proposed water pipelines.

New wastewater pipelines would tap into the existing 8-inch-diameter line that runs between Tanks 2 and 3 at the point where it intersects the access road. One new line would run along the access road north to the proposed office and control building and to the marine terminal, and another new line would run south along the access road to the warehouse building. Refer to Figure 11-1 for the locations of the proposed wastewater pipelines.

The proposed water and wastewater pipelines would be small, lateral connections from existing pipelines, and would be located within existing utility easements. While trenching would be required to underground portions of the lines, the majority of the work would be conducted on the project site and would not result in significant environmental effects. Provisions for water and wastewater service to the proposed project site would require some minor off-site construction to connect new utility lines with existing infrastructure. All infrastructure improvements and connections would occur within City streets, and would comply with the City's municipal code as well as any required permits from applicable agencies. The potable water line would be installed by the general contractor completing the overall piping and mechanical equipment installation, and the wastewater pipeline would be constructed by the City of Pittsburg. Therefore, impacts related to the construction of new water and wastewater facilities would be less than significant.

New 8-inch-diameter water and wastewater pipelines would also be installed to the proposed Rail Transload Facility in compliance with City of Pittsburg standards. The proposed water pipeline would be located within an existing utility easement along the south side of Leslie Drive. The service point connection would be coordinated with local providers and would be as close to the intersection of Cornwall Street and Leslie Drive as possible. The proposed wastewater pipeline to the administration building would connect to the existing wastewater pipeline. While trenching would be required to underground the lines, the majority of the work would be conducted in the roadway along Leslie Drive and on the project site and would not result in significant environmental effects.

The Terminal project site would utilize an existing on-site stormwater retention basin and would not connect to the City's stormwater system. Existing connections from the NRG-owned portion of the site would be removed or plugged to segregate the power plant from the proposed project. Upgrades to the existing on-site stormwater system at the East Tank Farm would include modification of one existing concrete pond to be used as a stormwater collection pond, installation of a new sump, and installation of a new aboveground line to connect the new sump to the north retention pond. A new aboveground line would also be installed to connect the north retention pond to the south retention pond. No major changes are proposed at the South Tank Farm. While portions of the existing stormwater system would be upgraded, no new stormwater systems would be constructed as a result of the project; therefore, impacts to stormwater drainage facilities at the Terminal would be less than significant.

Calculations of possible runoff from facility drainage areas during peak (25-year, 24-hour) storm events indicate that the existing stormwater retention basin has adequate capacity to accommodate peak flows. Additional flows from proposed impervious surfaces to be installed as part of the project (such as electrical buildings and pump stations) constitute an insignificant volume of runoff during a peak storm event (approximately 0.03 percent of the total from tank farm and marine terminal areas). As such, the stormwater retention basin is of adequate capacity to continue to serve as a collection area prior to discharge into Willow Creek. For more information regarding stormwater management, refer to Chapter 2.0: Proposed Project and Alternatives, and see Chapter 17.0: Water Resources.

The entire transloading platform at the Rail Transload Facility would be built on a sloped and curbed concrete slab, allowing for the capture of stormwater, spills, or leaks that occur during the transloading process. Since the concrete slab would be subject to spills and leaks, all rainwater that falls on the slab would be considered contact-water and subject to treatment. Stormwater collected on the slab would be routed to two underground storage tanks with a total capacity of 100,000 gallons. All water would then be run through an oil-water separator and discharged into a bioswale. A bioswale is an engineered drainage channel consisting of a loamy sand/soil mixture over gravel and a perforated drainage pipe. It promotes water recharge into the water table. In the event of an oil spill or leak, the system would

also capture the entire contents of one rail car, or about 30,000 gallons. The underground holding tanks would be used to capture catastrophic spills from a tank car or the discharge from the fire protection system in the event of a fire. Discharges of oil or firewater foam into the underground storage tanks would be removed using vacuum trucks and disposed of at an approved disposal facility, as required.

Mitigation Measure: No mitigation required.

Impact PSU-4: Determination that the wastewater service provider does not have adequate capacity to serve the project. (Less than significant.) During construction activities, approximately 6.8 million gallons of wastewater would be generated from personnel uses (e.g., lavatories and kitchen facilities) at the Terminal. The amount of wastewater that would be generated at the proposed Rail Transload Facility would be minimal, and would result from soil compaction and dust control. Construction activities associated with the proposed on-site utility pipelines, the proposed KLM Pipeline connection, the proposed pipeline from the Rail Transload Facility to the Terminal (Rail Pipeline), and the existing San Pablo Bay Pipeline would require the use of approximately 21 million gallons of water during hydrostatic testing, which would require wastewater treatment services. Once the hydrostatic testing is completed, the water would be drained from the pipeline into vacuum trucks or other suitable containers and then transported to a treatment facility and discharged in accordance with that treatment facility's permit requirements. The water used during hydrostatic testing would be re-used for each segment of the pipelines.

A total of 27.8 million gallons of water would require treatment and disposal as a result of construction activities. In 2011, the DDSD treatment plant treated an average of 13.2 mgd of sewage, and the plant has the capacity to treat approximately 16.5 mgd. The proposed project would generate approximately 27.8 million gallons over the entire 25-month construction period (which would average to approximately 1.1 million gallons per month). A permit would be obtained from the DDSD for discharge of the 27.8 million gallons of wastewater. This minimal amount would not result in a determination by the DDSD that it has inadequate capacity to serve the project's projected construction demand in addition to the provider's existing commitments.

Mitigation Measure: No mitigation required.

Impact PSU-5: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. (Less than significant.) The City of Pittsburg is within the jurisdictional boundaries of the San Francisco Bay Regional Water Quality Control Board (RWQCB). During construction, approximately 6.8 million gallons of wastewater would be generated from personnel uses, including lavatories and kitchen facilities. This wastewater would be transported to the water treatment facility via the local sewer system. In

addition, hydrotesting of the oil pipelines and the new on-site utility pipelines would generate approximately 21 million gallons of wastewater. Once the hydrostatic testing is completed, the water would be drained from the pipeline into vacuum trucks or other suitable containers and then transported to a treatment facility and discharged in accordance with that treatment facility's permits.

The RWQCB regulates wastewater discharge to surface waters (pursuant to the federal Clean Water Act and California's Porter-Cologne Water Quality Control Act) by granting permits to wastewater generators that contain specific requirements that limit the pollutants in discharges. The proposed project would not discharge construction wastewater to surface waters. All construction wastewater would be treated by the wastewater treatment facility in compliance with the facility's permits; therefore, the proposed project would not exceed any wastewater treatment requirements of the San Francisco Bay RWQCB. This impact would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-6: Temporary increase in solid waste generation. (Less than significant with mitigation.) Based on presently available information and industry standards and regulatory requirements, construction waste and demolition debris generated during the construction phase is expected to be significant. The amount of solid waste generated by construction activities at the Terminal would total approximately 760 tons and the proposed Rail Transload Facility would generate approximately 50 tons for a total of approximately 810 tons. This would be a substantial one-time contribution to the solid waste stream. Waste would include metal, concrete, waste oil, wood, asphalt, and other industrial waste. To the extent practicable, these wastes would be recycled according to Pittsburg Disposal Company's Construction and Demolition Recycling Waste Management Program. Waste oil such as residuals in existing tanks would likely be recycled off-site by a licensed waste oil recycling firm, as appropriate. For information regarding hazardous wastes, see Chapter 10.0: Hazards and Hazardous Materials. 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 (Environmental Commitment PSU-2; refer to Chapter 2.0: Proposed Project and Alternatives).

In addition, a portion of the existing piping and equipment (pumps, motors, and electrical equipment) would be demolished. The piping would be cleaned and stripped of insulation, and the insulation would be properly disposed of per regulatory requirements. The steel pipe and major equipment would likely be recycled as steel scrap. The amount of solid waste generated by demolition of the piping and equipment would total approximately 624 tons. It is anticipated that approximately 25 percent of the construction waste would be recyclable; primarily wood and paper. The nonrecyclable solid waste would be transferred to

Keller Canyon Landfill, which is not at capacity. Of the 244 acres permitted for disposal, only 40 acres are in use. With implementation of Mitigation Measure PSU-1, the impact of solid waste generation during construction would be less than significant.

Mitigation Measure PSU-1: Recycling of construction materials.

Excess construction materials shall be separated on-site for reuse/recycling or proper disposal. Separate bins for recycling of construction materials shall be provided on-site.

Impact PSU-7: Result in substantial adverse impacts to public utilities. (Less than significant.) The proposed KLM Pipeline connection and Rail Pipeline alignments parallel existing public utility corridors, including a sewer pipeline along the NRG facility entrance road and across West 10th Street, and a water pipeline through private property to the BNSF Railway Company (BNSF) property line. The proposed alignment also contains an inactive PG&E fuel oil pipeline. The design plans for the KLM Pipeline connection and the Rail Pipeline would address setbacks from parallel existing pipelines and crossing of existing pipelines (Environmental Commitment PSU-3; refer to Chapter 2.0: Proposed Project and Alternatives).

The proposed alignments for the KLM Pipeline connection and Rail Pipeline are tight corridors and are generally difficult to access, especially in wet weather because a portion of the area is not paved. Construction activities associated with the proposed new underground oil pipelines could inadvertently contact existing utility pipelines and/or facilities during underground construction, possibly leading to short-term utility service interruptions or wastewater spills. Underground Service Alert (USA) would be notified at least 14 days before initiating underground utility construction activities to help workers avoid impacts to other underground facilities during digging or trenching activities (Environmental Commitment PSU-4). USA verifies the location of all existing underground utilities and alerts the other utilities to mark their facilities in the area of anticipated construction activities. In addition, prior to subsurface work, a geophysical utility survey would be conducted to identify subsurface features that may not have been identified by USA (Environmental Commitment PSU-5). After USA verifies the location of all existing underground utilities and other utilities have marked their facilities in the area, and after the geophysical utility survey is conducted, underground utilities would be visibly marked (Environmental Commitment PSU-6) and, accordingly, the risk of a substantial adverse impact to public utilities would be less than significant.

Approximately 21 million gallons of water would be used for tank and pipeline hydrotesting during construction, and approximately 8 million gallons would be used by construction personnel for dust control and other miscellaneous purposes, for a total of approximately 29 million gallons of water. Because the PWTP currently operates at a peak rate of approximately 22 million gallons per day of

water, and the 29 million gallons of water anticipated to be used for construction activities would be spread over approximately two years, the City of Pittsburg has enough capacity to provide water to the project during construction. The impacts to water utilities during project construction would be less than significant.

In addition to the proposed new on-site water, wastewater, and stormwater connections, the Terminal would require natural gas for the marine thermal oxidizer, tank heaters, and possibly for the office and control building. An existing PG&E natural gas meter station located at the northwest corner of the South Tank Farm would be used to provide natural gas to the project site. PG&E would install the associated lateral connections and meters for the tank heaters and marine thermal oxidizer, designed and constructed to meet federal design codes for natural gas pipelines. The proposed natural gas pipelines would be 3.5 inches in diameter (refer to Figure 11-3). While trenching would be required to underground a portion of the line, the work would be conducted on the project site and would not result in significant environmental effects. Impacts resulting from construction of the natural gas pipelines would be less than significant.

A one-bank 115/4.16- or 66/4.16-kilovolt (kV) distribution substation would be constructed adjacent to Tank 15 at the South Tank Farm. The substation would require looping to PG&E's Pittsburg Power Plant 115-kV Substation approximately 2,000 to 3,000 feet northeast of the proposed substation location. The scope of work involved with the interconnection into PG&E's power line is to be determined in accordance with PG&E engineering specifications. From the proposed substation, 5-kV conduits would be installed on the existing aboveground pipeway to each of the four substation electrical buildings. Figure 11-3 shows the locations of the proposed substation, substation electrical buildings, and electrical conduit at the Terminal. No grading would be necessary at the substation site and no trenching would occur for the aboveground electric conduit. All construction would occur on the project site; therefore, impacts resulting from construction of the substation and electric conduit would be less than significant.

During construction of the Terminal portion of the project, electricity would generally only be used for welding equipment, temporary lighting, and temporary contractor trailers, and these energy requirements would primarily be provided by portable diesel generators. Portable diesel generators used to run temporary lighting and welding equipment would be located near the work area. Electrical power for the temporary trailers would be provided either by portable generators, or by a temporary connection to the local power plant electrical supply since the electrical load is considered to be very low. It is anticipated that construction of the project would use approximately 213 kilovolt-amperes (KVA) of electricity at full-load power demand (100 percent), and approximately 128 KVA at normal power demand (60 percent), excluding portable generators. If portable generators are used, the generator would be located centrally to minimize the insulated

wiring running to equipment and offices. This minimal amount of electricity needed during Terminal construction would be less than significant.

During construction of the proposed Rail Transload Facility, electricity would only be used for welding equipment, temporary lighting, and temporary contractor trailers. Construction machinery would run primarily on diesel-powered engines located near work areas. A temporary service connection would be provided, as permitted by the BNSF and PG&E, with an electrical load of 200 amperes. This minimal amount of electricity at the proposed Rail Transload Facility would be less than significant.

Mitigation Measure: No mitigation required.

Operational Impacts

Impact PSU-8: Result in substantial adverse impacts to levels of service for public services. (Less than significant.) The Terminal would be designed and constructed in accordance with all applicable State and fire codes. The marine terminal and the onshore storage terminal would be equipped with a fire suppression system meeting the requirements of the California State Lands Commission's Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) regulations and applicable requirements of the Contra Costa County Fire Protection District. Refer to Chapter 2.0: Proposed Project and Alternatives and Chapter 10.0: Hazards and Hazardous Materials for more detail regarding the proposed on-site fire suppression system. The CCCFPD has indicated that it is capable of handling fires occurring as a result of spills at the project site, and that if it did need help the PMAO would be called to assist. As described in Section 11.1.2.1, the CCCFPD provides "all risk" emergency services, which includes emergency response to hazardous materials spills, leaks, and releases as well as marine fires.

Security at the Terminal would likely be shared with the Pittsburg Generating Station and would consist of a combination of on-site personnel at the facility guard gate and remote cameras at the operations room that would provide video surveillance within the fenced area of the Terminal. WesPac operators would monitor the facility remotely from the control room and patrol the facility as part of the typical operating duties. The project is not expected to result in substantial increases in demand for local law enforcement services.

The project is not expected to require a large labor force (a maximum of approximately 40 full-time employees at the Terminal and Rail Transload Facility) during operations, and would likely employ workers from the region, resulting in little net increase in actual jobs. As a result, the project would not result in population growth beyond that discussed in the City's general plan. Therefore, there would be no increase in demand for additional schools or

hospitals, and no new physical environmental impacts would occur from the construction of schools or hospitals. This impact would be less than significant.

Operation of the Rail Transload Facility, San Pablo Bay Pipeline, KLM Pipeline connection, and Rail Pipeline would not require additional fire protection services. The San Pablo Bay Pipeline passes through fire protection districts that have established mutual aid agreements with nearby districts. The pipelines would not require additional police protection because they are underground and, therefore, it is unlikely that the pipelines would be subject to any significant vandalism occurrences that would require action from local police departments.

The Rail Transload Facility and pipelines would not require the construction or expansion of fire or police protection facilities, hospitals, or schools; therefore, impacts to public service providers would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-9: Result in noncompliance with required fire response distances or response times applicable to the project. (Less than significant.) As discussed in Section 11.1.2.1, the response time goal for the CCCFPD is to provide service within five minutes of notification. Generally, service can be provided in this timeframe to areas within 1.5 miles of a fire station, and the project sites are within the 1.5-mile response area of Station 84. A minor tank release and fire would be controlled within the tank's secondary containment. A major tank release or tank failure and fire, for example, as a result of fire or explosion, could burn for days; however, it is expected that the fire responders could contain the fire to the project site. Refer to Chapter 10.0: Hazards and Hazardous Materials for a detailed discussion about the impacts from fire and explosions.

The existing San Pablo Bay Pipeline is not easily accessed due to its position near the Concord Naval Weapons Station and wetland areas. In situations where a road does not provide access, the CCCFPD would likely attempt to reach the fire from the railroad tracks, which parallel the pipeline (Andrews, 2011). However, the risk of a fire at the pipeline is very low because two upset conditions would be required to occur and combine (i.e., both a pipeline rupture and a significant ignition source) for a fire to occur. Therefore, impacts to fire response distance or response times would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-10: Require new or expanded entitlements for water supply. (Less than significant.) Implementation of the proposed project would generate minimal increased demands for water consumption associated with on-site usage (restrooms and sinks in the office and control building and marine terminal, landscaping at the Terminal; administration building and rail transload operations

at Rail Transload Facility) and/or general site maintenance (washing). Additional pipelines would need to be extended to provide water service to the proposed office and control building and the marine terminal platform, and to the administration building and transloading area at the proposed Rail Transload Facility. However, as the proposed project has limited building development and would not include major water-consuming industrial operations, proposed project operation of the Terminal and Rail Transload Facility would not require substantial quantities of water. It is estimated that operations would involve the use of approximately 1,438 gallons of water per day. As described in Section 11.1.2.2, the City of Pittsburg has sufficient capacity to accommodate water required to support proposed project operations.

Mitigation Measure: No mitigation required.

Impact PSU-11: Determination that the wastewater service provider does not have adequate capacity to serve the project. (Less than significant.) Increased staff levels associated with Terminal and Rail Transload Facility project operations (a maximum of approximately 40 employees) would generate approximately 1,950 gallons of wastewater per day. Wastewater flows generated from implementation of the proposed project would be conveyed to, and treated by, the DDSD. In 2011, the DDSD treatment plant treated an average of 13.2 mgd of sewage, and the plant has the capacity to treat approximately 16.5 mgd. The minimal amount of water that would be used at the Terminal would not result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Mitigation Measure: No mitigation required.

Impact PSU-12: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. (Less than significant.) The City of Pittsburg is within the jurisdictional boundaries of the San Francisco Bay RWQCB. During operations, wastewater would only be generated from personnel uses, including lavatories and kitchen facilities. It is estimated that approximately 1,350 gallons per day of wastewater (sewage) would be generated during Terminal operations. Approximately 600 gallons per day of wastewater would be generated at the Rail Transload Facility during operations, for a total of 1,950 gallons per day. In 2011, the DDSD treatment plant treated an average of 13.2 mgd of sewage, and the plant has the capacity to treat approximately 16.5 mgd. As described under Impact PSU-5, the RWQCB regulates wastewater discharge to surface waters, and the proposed project would not discharge wastewater to surface waters. All wastewater generated during project operations would be treated by the wastewater treatment facility in compliance with the facility's permits; therefore, the proposed project would not exceed any wastewater

treatment requirements of the San Francisco Bay RWQCB. This impact would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-13: Require new solid waste facilities. (Less than significant.) Due to the nature of the proposed Terminal and Rail Transload Facility operations and the ongoing site presence of approximately 40 full-time employees at the Terminal and Rail Transload Facility, the magnitude and nature of waste generated during project operations is expected to be minimal and of a "household/commercial" nature. Containerization and removal of this solid municipal waste can be readily accommodated by the Pittsburg Disposal Service under their weekly 96-gallon Commercial Service Program, supplemented by additional containers for recycling of paper/cardboard and beverage containers. The proposed project would comply with federal, State, and local regulations and codes pertaining to solid waste disposal. The project would not require new solid waste facilities to be built; therefore, the impact would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-14: Result in substantial adverse impacts to public utilities. (Significant and unavoidable.) Should an oil spill occur at the marine terminal during operations, water service providers may be affected. The CCWD owns and operates the Mallard Slough Intake and Pump Station 2 miles west of the project site, which it uses to obtain untreated water from the Sacramento River during the winter and spring when fresh water from snow and rain flows down the Sacramento/San Joaquin rivers, keeping salt water from the San Francisco Bay west of Suisun Bay. The CCWD also manages and maintains facilities owned and operated by the USBR, including the Contra Costa Canal and its water intake at Rock Slough, as well as several untreated water laterals. CCWD water is drawn from Rock Slough near Oakley, Old River near the town of Discovery Bay, and Mallard Slough in Bay Point.

The two primary sources of water for the City of Antioch, east of Pittsburg, are the Sacramento-San Joaquin Delta and the Contra Costa Canal, which together provide Antioch with a total treated water capacity of 52 mgd. To obtain this water, Antioch owns and operates an intake facility along Fulton Shipyard Road in the lower San Joaquin River with the capacity to pump up to 16 mgd.

In the event of an accidental oil spill that is not immediately contained, oil may reach these intake facilities and these water providers would be unable to operate the water intakes, thereby losing a source of water. Based on the modeling results provided in Appendix O, a reasonable worst-case release of oil would have approximately a 90 percent to 100 percent chance of reaching the Mallard Slough intake and a 10 percent to 20 percent chance of reaching the Fulton Shipyard intake in the summer months, and a 50 percent to 60 percent chance of reaching

the Mallard Sough intake in the winter months. A spill occurring during the winter would not be expected to reach the Fulton Shipyard intake. No other water supply intakes are expected to be affected. Even with the implementation of contingency planning and response measures for oil spills, if a spill is not detected immediately, or if a moderate- or large-size spill occurred at or near the Terminal and was not quickly contained, then the spill could spread over a large area and impact water intakes. Temporary impacts to the raw water supply would be significant and unavoidable depending on the size of the spill and the season, because the CCWD and City of Antioch would each potentially lose a source of water. Impacts to water quality, should this occur, are discussed in detail in Chapter 17.0: Water Resources. Figure 17-3: Water Supply Facilities in Chapter 17.0 shows the locations of the existing water intakes in the project vicinity. Contingency planning and response measures for oil releases discussed in Chapter 10.0: Hazards and Hazardous Materials (refer to Impacts HM-4 and HM-5) would be implemented, per regulations, to minimize this impact to the extent feasible and practicable.

The proposed KLM Pipeline connection and Rail Pipeline parallel existing public utility corridors, including a sewer pipeline along the NRG facility entrance road across West 10th Street, and a water pipeline through private property to the BNSF property line. The proposed alignment also contains an inactive PG&E fuel oil pipeline. The design plans for the KLM Pipeline connection and the Rail Pipeline would address setbacks from parallel existing pipelines and crossing of existing pipelines (Environmental Commitment PSU-3).

The proposed alignments for the KLM Pipeline connection and Rail Pipeline are tight corridors and are generally difficult to access, especially in wet weather because a portion of the area is not paved. In the event of an oil spill from the proposed new underground pipelines, underground repair work could inadvertently contact existing utility pipelines and/or facilities, possibly leading to wastewater spills. In addition, the existing San Pablo Bay Pipeline is crossed by several existing third-party pipelines, which could also be inadvertently ruptured during underground repair work in response to an oil spill. USA would be notified at least 14 days before commencing underground utility construction activities to help workers avoid impacts to other underground facilities during digging or trenching activities (Environmental Commitment PSU-4). In addition, prior to subsurface work, a geophysical utility survey would be conducted to identify subsurface features that may not have been identified by USA (Environmental Commitment PSU-5). After notifying USA and conducting the geophysical utility survey, this impact would be less than significant.

Electricity demands during operation of the proposed project would be related to industrial uses such as vessel-unloading operations, transfer of crude oil, site and security lighting, and general site maintenance. The estimated average electrical energy usage for the project, including the Terminal and Rail Transload Facility sites, would be approximately 14,753 kilowatt hours per day. A new substation

would be constructed on-site to provide power to the Terminal. The substation would tie into PG&E's existing system and would not result in the need for PG&E to increase electrical capacity. Electricity to the Rail Transload Facility would be provided via service point connections close to Leslie Drive. Impacts resulting from electricity demand at the Terminal and Rail Transload Facility during operations would be less than significant.

The proposed project would generate minimal demand for natural gas associated with the marine thermal oxidizer and tank heaters. The total amount of natural gas needed for the marine thermal oxidizer would be approximately 187 standard cubic feet per minute (scfm). The total amount of gas and vapor required for tank heaters would be approximately 36 British thermal units per hour. Natural gas consumption at maximum operation would be approximately 15,000 cubic feet per hour for each heater. However, it is likely there would never be more than two heaters operating at one time, and it is estimated that the heaters would operate approximately 50 percent of the time over a one-year period. The increased demand for natural gas would be accommodated by PG&E via the existing gas meter station located on the project site. The existing natural gas supply line was constructed to supply gas to fire the entire NRG Pittsburg Generation Station and heat all of the tanks (including those in the proposed project area). Under the proposed project not all of the tanks would be heated, and the proposed project operations would have less than half the demand for heat than when the tanks were in operation as part of the NRG facility. Therefore, impacts to natural gas would be less than significant.

Mitigation Measure: No additional mitigation measures available.

11.2.3.2 Alternative 1: Reduced Onshore Storage Capacity

Construction-related Impacts

Impact PSU-15: Substantial adverse impacts to levels of service for public services. (Less than significant.) Similar to the proposed project, construction activities under Alternative 1 are not expected to increase the need for fire or police protection services. Construction would not generate demand for new schools or hospitals as a result of induced growth or population migration. Therefore, impacts to levels of service for public services would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-16: Result in noncompliance with required fire response distances or response times applicable to the project. (Less than significant.) As discussed in Section 11.1.2.1 and Impact PSU-2, the project sites are within the 1.5-mile response area of Station 84. Therefore, and impacts to fire response distance or response times would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-17: Construction of new water, wastewater, or stormwater drainage facilities, or expansion of existing facilities. (Less than significant.) The project would involve the construction of new potable water and wastewater (sewer) pipelines to the proposed office and control building to be located between Tank 1 and the marine terminal; to the marine terminal platform for a lavatory facility and a safety shower, as required by OSHA standards; and to the warehouse building. The proposed water and wastewater pipelines would be small, lateral connections from existing pipelines, and would be located within existing utility easements. While trenching would be required to underground portions of the lines, the majority of the work would be conducted on the project site and would not result in significant environmental effects. Although the tanks in the East Tank Farm would not be utilized under Alternative 1, the utility pipelines would need to run through the East Tank Farm to reach the marine terminal and the office and control building; therefore, impacts under Alternative 1 would be the same as for the proposed project.

New 8-inch-diameter water and wastewater pipelines would also be installed to the proposed Rail Transload Facility in compliance with City of Pittsburg standards. The proposed water pipeline would be located within an existing utility easement along the south side of Leslie Drive. The service point connection would be coordinated with local providers and would be as close to the intersection of Cornwall Street and Leslie Drive as possible. The proposed wastewater pipeline to the administration building would connect to the existing wastewater pipeline. While trenching would be required to underground the lines, the majority of the work would be conducted in the roadway along Leslie Drive and on the project site and would not result in significant environmental effects.

The Terminal project would utilize an existing stormwater retention basin on-site and would not connect to the City stormwater system. Similar to the proposed project, under Alternative 1, upgrades to the existing on-site stormwater system at the East Tank Farm would include modification of one existing concrete pond to be used as a stormwater collection pond, installation of a new sump, and installation of a new aboveground line to connect the new sump to the north retention pond. A new aboveground line would also be installed to connect the north retention pond to the south retention pond. While portions of the existing stormwater system

would be upgraded, no new stormwater systems would be constructed as a result of the project; therefore, impacts to stormwater drainage facilities would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-18: Determination that the wastewater service provider does not have adequate capacity to serve the project. (Less than significant.) During construction of the Terminal under Alternative 1, it is estimated that approximately 6.8 million gallons of wastewater would be generated from personnel uses at the Terminal. The amount of wastewater that would be generated at the proposed Rail Transload Facility would be minimal, and would result from soil compaction and dust control. Construction activities associated with the proposed on-site utility pipelines, the proposed KLM Pipeline connection, the proposed Rail Pipeline, and the existing San Pablo Bay Pipeline would require the use of approximately 21 million gallons of water during hydrostatic testing, which would require wastewater treatment services. The amount of wastewater that would require treatment and disposal would be the same as under the proposed project, and would not result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the projected construction demand in addition to the provider's existing commitments.

Mitigation Measure: No mitigation required.

Impact PSU-19: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. (Less than significant.) During construction, wastewater would be generated from personnel uses and hydrotesting of the oil pipelines and on-site utility pipelines. The amount of wastewater generated during construction would be the same as for the proposed project, and would not exceed any wastewater treatment requirements of the San Francisco Bay RWOCB.

Mitigation Measure: No mitigation required.

Impact PSU-20: Temporary increase in solid waste generation. (Less than significant with mitigation.) Construction waste and demolition debris generated during the construction phase is expected to be significant. The amount of solid waste generated by construction activities at the Terminal and Rail Transload Facility, and by the demolition of a portion of the existing piping and equipment would be a substantial one-time contribution to the solid waste stream. Refer to Impact PSU-6 for the types of solid waste expected to be generated. To the extent practicable, these wastes would be recycled according to Pittsburg Disposal Company's Construction and Demolition Recycling Waste Management Program. Waste that is not recyclable would be taken to a local landfill. The amount of solid waste generated during construction of Alternative 1 would be less than

under the proposed project because there would be minimal construction activity at the East Tank Farm. However, the amount of waste is still expected to be significant. With implementation of Mitigation Measure PSU-2, the impact of solid waste generation during construction would be less than significant.

Mitigation Measure PSU-2: Recycling of construction materials. Refer to Mitigation Measure PSU-1.

Impact PSU-21: Result in substantial adverse impacts to public utilities. (Less than significant.) Similar to the proposed project, construction activities associated with the proposed new underground oil pipelines, including the KLM Pipeline connection and Rail Pipeline, could inadvertently contact existing utility pipelines and/or facilities during underground construction, possibly leading to short-term utility service interruptions or wastewater spills. After notifying the USA and conducting the geophysical utility survey, this impact would be less than significant.

Alternative 1 would not involve the East Tank Farm; therefore, no water would be needed to provide dust control at the East Tank Farm. The City of Pittsburg has enough capacity to provide water to the proposed project during construction, and Alternative 1 would use less water during construction activities. The impacts to water utilities during project construction would be less than significant.

Under Alternative 1, the Terminal would require natural gas for the marine thermal oxidizer and the tank heaters at the South Tank Farm, but not for the heaters at the East Tank Farm. However, the natural gas pipelines to be constructed would be the same as for the proposed project because the pipeline would continue to run past the East Tank Farm to reach the marine thermal oxidizer. An existing PG&E gas connection located at the northwest corner of the South Tank Farm would be utilized to provide gas to the project site. PG&E would install the associated lateral connections and meters for the marine thermal oxidizer, designed and constructed to meet federal design codes for natural gas pipelines. The proposed natural gas pipelines would be small, lateral connections (refer to Figure 11-3). While trenching would be required to underground a portion of the line, the work would be conducted on the project site and would not result in significant environmental effects. Impacts resulting from construction of the natural gas pipelines would be less than significant.

Similar to the proposed project, an electrical substation would be constructed adjacent to Tank 15 at the South Tank Farm. Refer to Impact PSU-7 and Figure 11-3 for a description and location of the substation and electric conduit. No grading would be necessary at the substation site and no trenching would occur for the aboveground electric conduit. All construction would occur on the project site; therefore, impacts resulting from construction of the substation and electric conduit would be less than significant.

During construction, electricity would generally only be used for welding equipment, temporary lighting, and temporary contractor trailers, and these energy requirements would primarily be provided by portable diesel generators. The amount of electricity needed during construction would be minimal and impacts would be less than significant.

Mitigation Measure: No mitigation required.

Operational Impacts

Impact PSU-22: Substantial adverse impacts to levels of service for public services. (Less than significant.) The Terminal would be designed and constructed in accordance with all applicable State and fire codes. The marine terminal and the onshore storage terminal would be equipped with a fire suppression system meeting the requirements of the MOTEMS regulations and applicable requirements of the CCCFPD. Security would likely be shared with the NRG Pittsburg Generating Station and would consist of a combination of on-site personnel at the facility guard gate and remote cameras at the operations room. Similar to the proposed project, operation of Alternative 1 is not expected to result in substantial increases in demand for local fire protection or law enforcement services. Because Alternative 1 would not induce population growth, operations would not result in a demand for additional schools or hospitals, or create new physical environmental impacts from the construction of schools or hospitals.

Similar to the proposed project, operation of the Rail Transload Facility and pipelines under Alternative 1 would not require the construction or expansion of fire or police protection facilities, hospitals, or schools; therefore, impacts to public service providers would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-23: Result in noncompliance with required fire response distances or response times applicable to the project. (Less than significant.) The project sites are within 1.5 miles of Station 84, and are within the five-minute response time goal. Therefore, impacts to fire response distance or response times would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-24: Require new or expanded entitlements for water supply. (Less than significant.) Implementation of Alternative 1 would generate minimal increased demands for water consumption associated with on-site usage and/or general site maintenance. Additional pipelines would need to be extended to provide water service to the proposed office and control building, warehouse building, and the marine terminal platform, and to the administration building and rail transload operations at the Rail Transload Facility. Similar to the proposed

project, Alternative 1 would have limited building development and would not include major water-consuming industrial operations; therefore, Terminal and Rail Transload Facility operations would not require substantial quantities of water. The City of Pittsburg has sufficient capacity to accommodate water required to support project operations under Alternative 1.

Mitigation Measure: No mitigation required.

Impact PSU-25: Determination that the wastewater service provider does not have adequate capacity to serve the project. (Less than significant.) Similar to the proposed project, increased staff levels associated with operations under Alternative 1 (a maximum of 40 full-time employees at the Terminal and Rail Transload Facility) would generate a negligible increase in wastewater flows. Wastewater flows generated from implementation of the proposed project would be conveyed to, and treated by, the DDSD. The amount of water that would be used at the Terminal and Rail Transload Facility would not result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Mitigation Measure: No mitigation required.

Impact PSU-26: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. (Less than significant.) During operation of Alternative 1, wastewater would only be generated from personnel uses, including lavatories and kitchen facilities. Similar to the proposed project, because there would be only approximately 40 full-time employees at the Terminal and Rail Transload Facility, it is estimated that approximately 1,950 gallons per day of wastewater (sewage) would be generated during operations. This is a minimal amount of wastewater and would not exceed any wastewater treatment requirements of the San Francisco Bay RWQCB.

Mitigation Measure: No mitigation required.

Impact PSU-27: Require new solid waste facilities. (Less than significant.) Due to the nature of the proposed Terminal and Rail Transload Facility operations, the magnitude and nature of waste generated during operation of Alternative 1 is expected to be minimal and of a "household/commercial" nature. Containerization and removal of this solid municipal waste can be readily accommodated by the Pittsburg Disposal Service under their weekly 96-gallon Commercial Service Program, supplemented by additional containers for recycling of paper/cardboard and beverage containers. Similar to the proposed project, Alternative 1 would not require new solid waste facilities to be built; therefore, the impact would be less than significant.

Mitigation Measure: No mitigation required.

Impact PSU-28: Result in substantial adverse impacts to public utilities. (Significant and unavoidable.) Should an oil spill occur at the marine terminal during operation of Alternative 1, water service providers may be affected. CCWD water is drawn from Rock Slough near Oakley, Old River near the town of Discovery Bay, and Mallard Slough in Bay Point. In addition, the City of Antioch owns and operates an intake facility along Fulton Shipyard Road in the lower San Joaquin River. In the event of an accidental oil spill that is not immediately contained, oil may reach these intake facilities and these water providers would be unable to operate the water intakes, thereby losing a source of water. This could temporarily affect raw water supply to the region, particularly during drought years. While Alternative 1 would not include use of the East Tank Farm, enough oil would still be transferred and stored at the Terminal that the impact from a spill would not differ significantly from that of the proposed project. Even with the implementation of contingency planning and response measures for oil spills, if a spill is not detected immediately, or if a moderate- or large-size spill occurred at or near the Terminal and was not quickly contained, then the spill could spread over a large area and impact water intakes. Temporary impacts to the raw water supply would be significant and unavoidable. Contingency planning and response measures for oil releases discussed in Chapter 10: Hazards and Hazardous Materials (refer to Impacts HM-4 and HM-5) would be implemented, per regulations, to minimize this impact to the extent feasible and practicable.

The proposed KLM Pipeline connection and Rail Pipeline parallel existing public utility corridors. The proposed alignments are tight corridors and are generally difficult to access. In the event of an oil spill from the pipeline, underground repair work could inadvertently contact existing utility pipelines and/or facilities, possibly leading to short-term utility service interruptions or spills. In addition, the existing San Pablo Bay Pipeline is crossed by several existing third-party pipelines, which also could be inadvertently ruptured during underground repair work in response to an oil spill. After notifying USA and conducting the geophysical utility survey, this impact would be less than significant.

Electricity demands during operation of Alternative 1 would not differ significantly from the proposed project and are described under Impact PSU-14. Similar to the proposed project, a new substation would be constructed on-site, which would tie into PG&E's existing system and would not result in the need for PG&E to increase electrical capacity. Therefore, impacts resulting from electricity demand during operations of Alternative 1 are less than significant.

Alternative 1 would generate minimal demands for natural gas associated with the marine thermal oxidizer and tank heaters at the South Tank Farm. Because this alternative would not include the East Tank Farm, the heaters proposed at the East Tank Farm would not be needed; therefore, less natural gas would be used under Alternative 1. The total amount of natural gas needed for the marine thermal oxidizer would be approximately 187 scfm. The increased demand for natural gas

would be accommodated by PG&E via the existing gas meter station located on the project site (refer to Impact PSU-14 for details). Therefore, impacts to natural gas would be less than significant.

Mitigation Measure PSU-4: No additional mitigation measures available.

11.2.3.3 Alternative 2: No Project

Impact PSU-29: Substantial adverse impact to levels of service for public services. (No impact.) The proposed project site is an existing inactive marine and storage terminal and under Alternative 2 the facilities would remain as they stand. No construction would occur and no oil would be transferred or stored at the site; therefore, the risk of fire or other emergency would be negligible. NRG would continue to own the site and provide security services, including a combination of on-site personnel at the facility guard gate and remote cameras at the operations room that provide video surveillance within the fenced area of the project site. NRG operators would continue to monitor the facility remotely from the control room and patrol the facility as part of the typical operating duties. In addition, construction of the Rail Transload Facility and pipeline would not occur. Therefore, there would be no increased need for service providers such as fire or police protection, schools, or hospitals above the level that currently exists, and no impacts would occur as a result of Alternative 2.

Mitigation Measure: No mitigation required.

Impact PSU-30: Result in noncompliance with required fire response distances or response times applicable to the project. (No impact.) Fire response times would remain the same as they are now. No impacts would occur.

Mitigation Measure: No mitigation required.

Impact PSU-31: Construction of new water, wastewater, stormwater drainage, solid waste, or energy facilities, or expansion of existing facilities. (No impact.) Because no construction or operations would occur at the Terminal and the facility would be maintained the same way it is now, water and energy use would be minimal and only used to maintain the property. In addition, construction of the Rail Transload Facility and pipeline would not occur. Stormwater would continue to drain in the existing manner, and solid waste would not be generated. There would be no need to construct new water, wastewater, stormwater drainage, solid waste, or energy facilities, or expand existing facilities. No impacts would occur.

Mitigation Measure: No mitigation required.

Impact PSU-32: Require new or expanded entitlements for water supply, result in a determination that the wastewater treatment provider does not have adequate capacity, or exceed wastewater treatment requirements. (No impact.) Under Alternative 2, no construction or operations would occur at the Terminal and the facility would be maintained the same way it is now. No water would be used in excess of existing uses, and no additional wastewater would be generated. In addition, construction of the Rail Transload Facility and pipeline would not occur. Therefore, no new or expanded entitlements for water supply would be needed, and the project would not exceed wastewater treatment requirements or the capacity of the wastewater provider. No impacts would occur.

Mitigation Measure: No mitigation required.

Impact PSU-33: Result in substantial adverse impacts to public utilities. (No impact.) Under Alternative 2 the existing facilities would remain as they stand. No additional utility laterals or oil pipelines would be constructed because no utilities would be needed beyond what is existing at the site. No trenching would occur that could impact existing utility pipelines. No impacts would occur.

Mitigation Measure: No mitigation required.

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11.3.2 Personal Communication

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