Draft Environmental Impact Report
SCH No. 2023120466

Martinez Terminal Rail Restoration Project

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
2022 Scoping Plan	2022 Climate Change Scoping Plan
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	asbestos-containing material
af	acre-feet
AIRS	EPA Aeromatic Information Retrieval System
AQMP	Air Quality Management Plan
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Water Quality Control Plan
bbls	barrels
BERD	Built Environment Resource Directory
bgs	below ground surface
BMP	Best Management Practices
BNSF	Burlington Northern Santa Fe
Btu	British thermal unit
CAA	federal Clean Air Act
CAP	Climate Action Plan
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
Cal-EMA	California Emergency Management Agency
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code, Title 24, Part 11
Cal OES	California Governor’s Office of Emergency Services
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CA FID UST	California Facility Inventory Database

CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERS	California Environmental Reporting System
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	methane
CHMIRS	California Hazardous Material Incident Report
CIRP	Inventory of Rare and Endangered Plants of California
City	City of Martinez
CIWQS	California Integrated Water Quality System
CNEL	Community Noise Equivalent Level
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CONFIRE	Contra Costa County Fire Protection District
CORRACTS	Resource Conservation and Recovery Act Corrective Action
CPS-SLIC	Cleanup Program Sites Site Cleanups
CPT	Cone Penetrometer Test
CPUC	California Public Utilities Commission
CREC	Controlled Recognized Environmental Condition
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Ranks
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel

dBA	A-weighted decibel
DEED	Deed Restriction Listing
DPM	Diesel Particulate Matter
DPS	Distinct Population Segment
DTSC	Department of Toxic Substances Control
ECD	Environmental Conservation District
ECHO	EPA Enforcement and Compliance History Online
EFH	Essential Fish Habitat
EIR	Environmental impact report
EMI	Emissions Inventory Data
EMMA	Emergency Managed Mutual Aid
ENF	Enforcement Action Listing
ERNS	Emergency Response Notification System
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FINDS	EPA Facility Index System
FIRM	Flood Insurance Rate Map
FT	Federally Threatened
FTA	Federal Transit Administration
General Plan	City of Martinez General Plan
GHG	greenhouse gas
GO	General Order
GWh	gigawatt-hours
GWP	global warming potential
H_2S	hydrogen sulfide
HASP	Health and Safety Plan
HazMat	Hazardous Materials
Hazard Mitigation Plan	Contra Costa County Hazard Mitigation Plan
HAZNET	Hazardous Waste Manifests Database
HEC-HMS	Hydrologic Engineering Center Hydrologic Modeling System
H-I	Heavy Industrial
HIST CORTESE	Historical “Cortese” Hazardous Waste & Substances List
HGMP	Hazard Mitigation Grant Program
HMMP	Habitat Mitigation and Monitoring Plan

HREC	Historical Recognized Environmental Condition
HSC	Health and Safety Code
HWTS	Hazardous Waste Tracking System
HWP	Hazardous Waste Program Registry
I-680	Interstate 680
ICIS	EPA Integrated Compliance Information System
IEPR	Integrated Energy Policy Reports
iPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
ISO	Industrial Safety Ordinance
ITE	Institute of Transportation Engineers
km	kilometer
KMEP	Kinder Morgan Energy Partners, LP
kWh	kilowatt-hours
LBP	lead-based paint
L_{dn}	Day-Night average
L_{eq}	equivalent sound level
LEV	Low Emission Vehicle
LID	Low Impact Development
L_{max}	maximum sound level
L_{min}	minimum sound level
L_n	exceedance level
LUC	land use covenant
LUCI	Governor's Office of Land Use and Climate Innovation
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
$\mu g/m^3$	micrograms per cubic meter
mm	millimeter
MS4	multiple separate storm sewer system
MTBE	methyl tertiary butyl ether
MTC	Metropolitan Transportation Commission
$MTCO_2$	metric tons of carbon dioxide
MTCO2e	metric tons of carbon dioxide equivalents
MMRP	Mitigation Monitoring and Reporting Program
MMTCO2e	million metric tons of carbon dioxide equivalents

MPD	Martinez Police Department
Municipal Code	City of Martinez Municipal Code
MW	megawatt
MWh	megawatt-hours
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NHPA	National Historic Preservation Act
NIOSH	National Institute for Occupational Safety and Health
NMFS	National Marine Fisheries Service
N_2O	nitrous oxide
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
O_3	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PCB	polychlorinated biphenyls
PFAS	per- and polyfluoroalkyl substances
PG&E	Pacific Gas and Electric
PM	particulate matter
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
proposed project	Martinez Terminal Rail Restoration Project
PST	Pacific Standard Time
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RCRA LGQ	Resource Conservation and Recovery Act Large Quantity Generators
RCRA SGQ	Resource Conservation and Recovery Act Small Quantity Generators

RCRA TSDF	Resource Conservation and Recovery Act Treatment, Storage, and Disposal Facilities
RCRA NONGEN/NLR	Resource Conservation and Recovery Act Nongenerators/No Longer Regulated
REC	Recognized Environmental Condition
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank
RH	relative humidity
RMS	root mean square
ROG	reactive organic gases
ROW	right-of-way
RPS	California Renewables Portfolio Standard
RPW	relatively permanent waters
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SEMS	Superfund Enterprise Management System
SF_6	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SMP	Soil Management Plan
SO_2	sulfur dioxide
SO_4^{2-}	sulfates
SO_X	sulfur oxides
SPH	separate phase hydrocarbons
SS	Stationary Source
SSC	Species of Special Concern
STORMS	Strategy to Optimize Management of Storm Water
SWEEPS UST	Statewide Environmental Evaluation and Planning System UST
SWF/LF	Solid Waste Information System/Landfills
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board

TAC	toxic air contaminants
TCP	Traffic Control Plan
TMDL	total maximum daily loads
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
UBC	Uniform Building Code
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
US FIN ASSUR	Financial Assurance Information
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program Properties
VMT	vehicle miles traveled
VOC	volatile organic compounds
WDS	Waste Discharge System Database
WEAP	Workers Environmental Awareness Program
WL	Watch List
WMUDS/SWAT	Waste Management Unit Database System/Soil and Water Assessment Tool
WQBEL	water quality-based effluent limitations

EXECUTIVE SUMMARY

ES.1 Introduction

This Environmental Impact Report (EIR) has been prepared to evaluate potential environmental effects that would result from implementation of the proposed Martinez Terminal Rail Restoration Project (proposed project). This EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (California Public Resources Code Section 21000 et. seq., as amended) and its implementing guidelines (California Code of Regulations, Title 14, Section 15000 et. seq.). The City of Martinez (City) is the lead agency responsible for compliance with CEQA for the proposed project, and the Project Applicant is TransMontaigne Partners LLC.

This Executive Summary provides a brief background of the proposed project; location and setting; the project objectives; a discussion of the characteristics of the proposed project; alternatives to the proposed project; and issues raised by the public and agencies during the EIR scoping process. Table ES-1 at the end of this section includes a summary of the potential environmental impacts resulting from implementation of the proposed project, the feasible mitigation measures proposed to avoid or substantially reduce those impacts, and the impact level of significance following the implementation of mitigation measures, if required.

ES.2 Project Background

The Martinez Terminal, in its current iteration as a storage and transportation hub for petroleum and renewable products and related feed and blend stocks, has been in operation since the first set of tanks was constructed in 1973. However, rail service to the site was originally established in the early 1900s and the previous rail spur was idled and decommissioned in the late 1990s/early 2000s. Currently, products arrive at the Martinez Terminal via wharf or pipeline. The proposed project would reestablish the former rail line on the south side of the existing Martinez Terminal, connecting to the existing Union Pacific Railroad (UPRR) railroad tracks south of Waterfront Road and restore rail service to the Martinez Terminal property. Implementation of the proposed project would not result in a net increase in the annual throughput of products handled and stored at the Martinez Terminal. Rather, the volume of products that would be transported to and from the facility via the reestablished rail spur would offset the volume of products that are currently transported via pipeline or wharf.

ES.3 Project Location and Setting

The project site is located in the City of Martinez in northern Contra Costa County. The City is located approximately nine miles northeast of Oakland and approximately 20 miles northeast of San Francisco. The City is located on the southern shore of the Carquinez Strait, a tidal waterway that connects Suisun Bay on the east with San Pablo Bay on the west. Industrial uses associated with petroleum product refinery and rail and ship transportation infrastructure are concentrated in the northeastern portion of the City adjacent to the Carquinez Strait, as this waterway provides access to shipping routes in and out of the San Francisco Bay. The Martinez Terminal is located at 2801 Waterfront Road within the industrial properties at the eastern boundary of the City on the southern shore of the Carquinez Strait. Martinez is generally bounded by the Carquinez Strait on the north; the unincorporated communities of Avon, Maltby, and Vine Hill on the east; the City of Pleasant Hill on the south; and the unincorporated communities of Glen Frazer and Alhambra Valley on the west.

The project site is located at the southern boundary of the existing Martinez Terminal industrial property. The project site comprises approximately 2.7 acres along the southern boundary of the Martinez Terminal and extends south of Waterfront Road to the existing UPRR tracks. The project would be situated within the Martinez Terminal property and within UPRR ROW, with Waterfront Road bisecting the project site. The project site is bounded by the northern portion of the Martinez Terminal property on the north, industrial and undeveloped lands on the east, the UPRR ROW on the south, and State lands and tidelands on the west.

The eastern portion of the project site is located within the UPRR corridor and contains the UPRR Mococo Rail Line, which consists of a single spur of track on a raised gravel bed. This rail line provides service to 15 trains daily, 13 of which are commuter trains and two of which are freight trains.

The western portion of the project site is located in the southern portion of the 255-acre Martinez Terminal property, located at 2801 Waterfront Road. The Martinez Terminal property is currently developed with pipelines, storage tanks, office space, and related facilities associated with its operation as a storage and transportation hub for petroleum and renewable products and related feed and blend stocks. The existing Martinez Terminal has a single wharf at the northern end of the property, where marine vessels dock.

Vehicular access to the Martinez Terminal property is provided via an automated slide gate driveway located off of Waterfront Road. Local roadway access to the project site is provided via Waterfront Road, which bisects the project site, and Marina Vista Avenue, which is the western continuation of Waterfront Road. Regional access to the project site is provided via Interstate 680 (I-680), approximately 0.6 miles west of the project site. Other access to the property is provided at the wharf where material is moved via ships.

The project site is designated IM for industrial and manufacturing uses in the City's General Plan 2035 and zoned H-I (Heavy Industrial) in the City's Zoning Code. The H-I Zone allows for petroleum and petroleum products refining including gasoline, kerosene, naphtha, and oil; petroleum products storage; and railroad freight stations, repair shops, and yards. The project site is also zoned ECD (Environmental Conservation District) Zone because of its location near the Carquinez Strait.

ES.4 Project Objectives

The overall purpose of the proposed project is to reestablish the rail spur and associated facilities at the project site to restore the Martinez Terminal to the operational functionality historically available and permitted at the site. Specific objectives related to the overall project purpose include the following:

- Implement facility improvements at the existing terminal to increase functional operational capacity at the project site.
- Minimize the need to extend existing product conveyance infrastructure (i.e., pipelines, pumping systems, etc.) by siting facilities in proximity to existing storage infrastructure.
- Limiting the amount of facility improvements required by relying on existing rail transportation methods.

ES.5 Proposed Project Characteristics

The proposed project would reestablish the former rail line on the south side of the existing Martinez Terminal, connecting it to the existing UPRR railroad tracks south of Waterfront Road.

The proposed project would include construction of approximately 3,850 linear feet of new track, with a lead track of approximately 1,900 feet, and three operating industry tracks of approximately 650 feet each. These tracks would accommodate 21 railcars for transportation of a range of petroleum-based and renewable products, feed stocks, and blend stocks commodities, similar to current operations at the terminal. Trains would deliver material to, or ship from the Martinez Terminal for distribution, and facilities at the Martinez Terminal would be installed and/or upgraded to accommodate these shipments. Material that is unloaded would be transferred from the railcars into storage tanks within the terminal, where it would be aggregated for shipment by marine wharf or pipeline.

The rail spur would cross under the existing Waterfront Road overpass and then head northwesterly into the Martinez Terminal property. The new track would be positioned between the existing bridge columns with applicable pier protection provided. Additionally, retaining walls would be required to provide support on either side of the operating industry tracks in the northwestern portion of the project site. A standard UPRR railroad ditch would be constructed along the new track outside of the terminal to capture and infiltrate storm water runoff from the proposed rail spurs and retain existing drainage patterns. This ditch would facilitate existing runoff patterns and would drain to an existing ponding area. Additionally, drainage systems would be incorporated into the retaining walls and pier protection. These drainage systems would collect runoff flows behind the face of the walls and route them to underdrains leading to a proposed sump within the Martinez Terminal property. Runoff from the northwestern portion of the project site not collected in the underdrains would be collected in a secondary containment system to be cleared of any spill materials. Once cleared, runoff from the secondary containment system would flow to the proposed new sump.

The proposed project would involve the installation of piping, headers, and hose connections at the operating spur area, a pumping system, and an upgraded heating plant with thermal oil and railcar steam generation equipment; conversion of two existing aboveground storage tanks to heated product service; and construction of additional pipeline shipping modifications within the existing terminal.

Construction of the proposed rail spur is anticipated to begin in spring 2026 and take approximately 12 months to complete, concluding in spring 2027.

ES.6 Project Alternatives

In accordance with the CEQA Guidelines, alternatives to the proposed project have been considered in this EIR to explore potential means to mitigate or avoid the significant environmental impacts associated with implementation of the proposed project while still achieving the primary objectives of the project. Pursuant to Section 15126.6(a) of the CEQA Guidelines, an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR should present a reasonable range of feasible alternatives that will support informed decision making and public participation regarding the potential environmental consequences of a project and possible means to address those consequences. The alternatives analysis must also include a comparative evaluation of the No Project Alternative in accordance with Section 15126.6(e) of the CEQA Guidelines to determine the consequences of not implementing the project. Through the identification, evaluation, and comparison of alternatives, the relative advantages and disadvantages of each alternative compared with the proposed project can be determined.

Three alternatives were considered but eliminated from further consideration in this EIR, as discussed in Chapter 5, Alternatives. Due to numerous constraints at the project site and the nature of the project, one feasible alternative, the "No Project Alternative," has been carried forward for detailed analysis in this EIR. Under the No Project Alternative, the proposed project would not be implemented in any manner, no construction activities would occur, and the former rail spur serving the Martinez Terminal property would not be reestablished and products would continue to be delivered to the facility only via wharf and pipeline. The No Project Alternative would avoid the potentially significant impacts to biological resources, cultural resources, hazards and hazardous materials, and tribal cultural resources associated with ground-disturbing and construction activities; however, it would also result in greater long-term operational impacts related to air quality, energy, and greenhouse gas emissions. Additionally, the No Project Alternative would not support the overall purpose of the project or achieve any of the project objectives. Therefore, the proposed project would be considered the environmentally superior alternative.

ES.7 Issues Raised by the Public and Agencies

A Notice of Preparation (NOP) was published for this Draft EIR on December 18, 2023, to notify responsible and trustee agencies, stakeholders, and other interested parties that the City planned to prepare a Draft EIR and to request input regarding the scope and content of the environmental analysis and information to be included in the Draft EIR. The NOP and Initial Study were circulated for a 30-day comment period from December 18, 2023, to January 19, 2024. The NOP was sent to approximately 50 agencies, stakeholders, and other interested parties. Additionally, the NOP was published in the Contra Costa Times newspaper on December 18, 2023. The NOP and Initial Study were also made available for review online.

A public scoping meeting for the proposed project was held to obtain input on the scope of the contents of the EIR. The meeting consisted of a virtual meeting hosted on the Zoom platform on January 9, 2024. One individual attended the virtual meeting. A total of three written comment letters were received from public agencies and an interested party during the 30-day comment period. The NOP, Initial Study, and all comments received on the NOP and Initial Study are provided in Appendix A. The following list summarizes the public comments that were received during the comment period related to environmental issues:

- **Cultural Resources**: The EIR should assess the potential for encountering archaeological resources, and mitigation of project-related impacts to archaeological resources should be identified (refer to Section 3.3, Cultural Resources).
- **Greenhouse Gas Emissions:** The EIR should assess the potential for the proposed project to reduce greenhouse gas emissions related to goods movement (refer to Section 3.6, Greenhouse Gas Emissions).
- **Transportation**: The EIR should assess the potential for the proposed project to affect state ROW facilities (refer to Section 3.10, Transportation).
- **Tribal Cultural Resources**: Native American tribal consultation should be conducted in accordance with Assembly Bill 52 and Senate Bill 18. The EIR should address the existence and significance of tribal cultural resources, and mitigation of project-related impacts to tribal cultural resources should be identified (refer to Section 3.11, Tribal Cultural Resources).

ES.8 Summary of Environmental Impacts

An analysis of the potential environmental impacts associated with implementation of the proposed project has been conducted and is contained in this EIR. Eleven environmental issue areas are analyzed in detail in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, of this EIR. Table ES-1 provides a summary of the potential environmental impacts detailed in Chapter 3 of this EIR that would result from construction and operation of the proposed project, mitigation measures that would lessen potentially significant environmental impacts, and the level of significance of the environmental impacts that would remain after implementation of mitigation, if necessary. The EIR identifies potentially significant impacts requiring mitigation measures for biological resources; cultural resources; hazards and hazardous materials; and tribal cultural resources. The EIR identifies less than significant impacts for air quality, energy, geology and soils, greenhouse gas emissions, hydrology and water quality, noise, and transportation. No significant and unavoidable impacts have been identified for implementation of the proposed project.

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
AIR QUALITY			
AQ-1 Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than significant	No mitigation measures are required.	Less than significant
AQ-2 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less than significant	No mitigation measures are required.	Less than significant
BIOLOGICAL RESOURCES			
BIO-1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially significant	**BIO-A** Prior to construction, and during the appropriate blooming periods for special-status plant species with the potential to occur within the project site, a qualified biologist shall have conducted focused rare plant surveys across the entire project site following 2018 California Department of Fish and Wildlife (CDFW) and/or 2001 California Native Plant Society (CNPS) guidelines to determine presence or absence of special-status plant species. The surveys shall be floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity) and include site visits covering early, mid, and late-blooming season species. If populations of special-status plants are found during the survey and they are located within permanent or temporary impact areas, avoidance and minimization measures shall be explored to protect the special-status plant population(s). If avoidance is not possible, consultation with CDFW shall be required prior to project initiation to identify suitable compensatory mitigation for the unavoidable loss of these species. Preparation of a Habitat Mitigation and Monitoring Plan (HMMP) detailing	Less than significant

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		relocation, salvage, and/or restoration of impacted species and subsequent maintenance and monitoring; payment of an in-lieu fee to an agency approved mitigation bank; or acquisition of off-site lands to be held in a restrictive deed for perpetuity would be required to compensate for the loss of habitat occupied by any non-listed special-status plant species found on-site. In the unlikely event a State or federally listed plant species is present and avoidance is not feasible, consultation with CDFW and/or U.S. Fish and Wildlife Service (USFWS) would be required prior to initiating any on-site project activities to coordinate any take permits pursuant to State and/or federal regulations and requisite compensatory mitigation. **BIO-B** Prior to the start of project construction, a qualified biologist shall be identified and serve as the lead biological monitor to ensure that impacts to all biological resources are minimized or avoided, and shall conduct (or supervise) pre-construction field surveys for species that may be avoided, affected, or eliminated as a result of vegetation removal, grading, or any other project activities. The lead biological monitor shall ensure that all surveys are conducted by qualified personnel and that they possess all necessary permits and memoranda of understanding with the appropriate agencies for the handling of potentially occurring special-status species. The lead biological monitor shall also ensure that daily monitoring reports (e.g., survey results, protective actions, results of protective actions, adaptive measures, etc.) are prepared, and shall make these monitoring reports available upon request. A qualified biologist shall present a Worker Environmental Awareness Program (WEAP) to all construction crews and contractors prior to starting any	

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		work on the project site. The WEAP training would include a review of the special-status species and other sensitive resources that could exist in the project area, the locations of sensitive biological resources as well as their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all personnel trained shall be maintained and submitted upon request. Project limits shall be clearly delineated with fencing or other boundary markers prior to the start of construction. During construction, construction workers shall strictly limit their activities, vehicles, equipment, and construction materials to the designated construction limits and staging areas. The biological monitor shall be present during vegetation removal and ground-disturbing activities to inspect and enforce mitigation requirements, conduct daily clearance surveys of work areas, and to relocate any species that may come into harm's way to an appropriate offsite location of similar habitat. The biological monitor shall be authorized to stop specific grading or construction activities if violations of mitigation measures or any local, state, or federal laws are suspected. If ongoing biological monitoring of construction activities reveals the presence of any special-status wildlife within an active work area, then work shall be temporarily halted until the animals leave on their own volition or can be collected and relocated to areas outside of the designated work zones. Any non-listed special-status species occurring within the work area shall be collected and relocated to areas outside of the designated work zones. In the unlikely event a federal or State listed species is identified during surveys, no work shall be allowed within 500 feet of the	

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		species, and the appropriate trustee agencies (California Department of Fish and Wildlife or U.S. Fish and Wildlife Service) shall be consulted first to determine an appropriate course of action. Upon completion of vegetation and earth disturbance activities, the biological monitor shall be available to conduct as needed spot checks during construction and respond to requests from project personnel as they arise to remove wildlife, answer any questions, and generally provide as-needed support to confirm project measures are implemented. During construction, all equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas within the project limits. Equipment shall be checked daily for leaks prior to operation and repaired as necessary, and secondary containment shall be implemented during equipment and vehicle staging. During construction, the project limits shall be kept as clean of debris and trash as possible to avoid attracting predators of sensitive wildlife. Food-related trash items shall be kept in sealed containers and removed daily from the construction work zone. **BIO-C** Proposed construction activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the nesting bird season, which generally runs from February 1 through August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. Depending on the avian species present, a qualified biologist may determine that a change in the breeding season dates is warranted.	

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		If avoidance of the avian breeding season is not feasible, a qualified biologist with experience in conducting breeding bird surveys shall conduct two bird surveys, fourteen (14) days and no more than three (3) days, prior to project activities to detect protected birds occurring on-site and, as access to adjacent areas allows, other suitable habitats within 500 feet of the project site. If a protected bird is found, the project proponent may delay all project activities within 300 feet of on- and off-site suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist may continue the surveys to locate any nests. If an active nest is located, project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. A reduced buffer can be established if determined appropriate by the project biologist. The biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor shall prepare and provide upon request monitoring reports during the grubbing and clearing of vegetation.	

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
BIO-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	Potentially significant	**BIO-D** The following measures shall be implemented to minimize construction impacts to protected wetlands: • Project materials shall not be cast from the project site into nearby habitats; further, project-related debris, spoils, and trash shall be contained and removed to a proper disposal facility. • All construction equipment shall be inspected and cleaned prior to use in the project footprint to minimize the importation of non-native plant material. All mulch, topsoil, and seed mixes used during post-construction landscaping activities and erosion control Best Management Practices shall be free of invasive plant species propagules. A weed abatement program shall be implemented should invasive plant species colonize the area within the project footprint post-construction.	Less than significant
BIO-3 Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially significant	Refer to Mitigation Measure BIO-D above.	Less than significant
BIO-4 Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially significant	Refer to Mitigation Measure BIO-C above.	Less than significant
BIO-5 Would the project interfere substantially with the movement of any native resident or migratory fish or	Potentially significant	Refer to Mitigation Measure BIO-C above.	Less than significant

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			
CULTURAL RESOURCES			
CUL-1 Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	No Impact	No mitigation measures are required.	No Impact
CUL-2 Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Potentially significant	**CUL-A Worker Environmental Awareness Plan:** Prior to the beginning of the earth-moving construction activities, the construction crew shall be informed of the nature of cultural resources and the regulatory protections afforded those resources. The crew shall also be informed of procedures relating to the discovery of unanticipated resources. The crew shall be cautioned not to collect artifacts, and directed to inform a construction supervisor and the on-site archaeological monitor in the event that cultural resources or human remains are discovered during the course of construction, including when a cultural resources monitor is not present. The on-site monitor shall administer supplemental briefing to all new construction personnel, prior to their commencement of earth-moving construction activities. **CUL-B Archaeological Resources Monitoring:** Archaeological monitoring for all ground-disturbing activities that have the potential to encounter archaeological resources shall be conducted by a qualified archaeological monitor who is working under the guidance of an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology (48 Federal Register 44738).	Less than significant

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Ground-disturbing activities include, but are not limited to, geotechnical boring, boring, trenching, grading, and excavating. The archaeological monitor shall observe ground-disturbing activities in all areas with potential to contain significant cultural deposits. These locations are anticipated to include the east and west side of the project site, where geologic maps indicate Holocene deposits exist. If, during the course of project excavations, the qualified archaeologist determines that archaeological sensitivity within the project site is low due to prior disturbances, then monitoring may be reduced or eliminated at the discretion of the qualified archaeologist. **CUL-C Archaeological Resources Inadvertent Discovery:** In the event that any subsurface cultural resources are encountered during earth-moving activities, it is recommended that all work within 100 feet be halted until an archaeologist can evaluate the findings and make recommendations. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include wood, stone, or concrete footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, metal, glass, ceramics, and other refuse. The archaeologist will evaluate the find in accordance with federal, state, and local guidelines, including those set forth in the PRC Section 21083.2, to assess the significance of the find and identify avoidance or other measures as appropriate.	

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
CUL-3 Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Less than significant	No mitigation measures are required.	Less than significant
ENERGY			
ENE-1 Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than significant	No mitigation measures are required.	Less than significant
ENE-2 Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than significant	No mitigation measures are required.	Less than significant
GEOLOGY AND SOILS			
GEO-1 Would the project directly or indirectly directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?	Less than significant	No mitigation measures are required.	Less than significant
GEO-2 Would the project result in substantial soil erosion or the loss of topsoil?	Less than significant	No mitigation measures are required.	Less than significant
GEO-3 Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than significant	No mitigation measures are required.	Less than significant

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
GEO-4 Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than significant	No mitigation measures are required.	Less than significant
GEO-5 Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than significant	No mitigation measures are required.	Less than significant
GREENHOUSE GAS EMISSIONS			
GHG-1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than significant	No mitigation measures are required.	Less than significant
GHG-2 Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than significant	No mitigation measures are required.	Less than significant
HAZARDS AND HAZARDOUS MATERIALS			
HAZ-1 Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than significant	No mitigation measures are required.	Less than significant
HAZ-2 Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially significant	**HAZ-A** Prior to construction activities, a project-specific soil management plan shall be prepared that outlines soil management procedures and protocols for handling previously unidentified contaminated soils. **HAZ-B** All construction personnel shall utilize personal protective equipment during grading, excavation, and all other activities involving the handling of soils to minimize contact with contaminated soils. Such equipment may	Less than significant

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		include, but not be limited to, gloves, safety glasses or goggles, hard hats, coveralls, shoe covers, and respirators with HEPA filters. **HAZ-C** If excavated soils stored within the Martinez Terminal property are removed from the site, additional lab testing of such soils for organochlorine pesticides, polychlorinated biphenyls, semivolatile organic compounds, asbestos, and any other constituent testing required by the receiving facility shall be conducted prior to soil removal.	
HAZ-3 Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Potentially significant	Refer to Mitigation Measures HAZ-A, HAZ-B, and HAZ-C above.	Less than significant
HYDROLOGY AND WATER QUALITY			
HWQ-1 Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than significant	No mitigation measures are required.	Less than significant
HWQ-2 Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in (i) substantial erosion or siltation on- or off-site, (ii) substantially increase the rate or amount of surface runoff in a manner which would result in	Less than significant	No mitigation measures are required.	Less than significant

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
flooding on- or off-site, or (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or (iv) impede or redirect flood flows?			
HWQ-3 Would the project risk release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone?	Less than significant	No mitigation measures are required.	Less than significant
HWQ-4 Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than significant	No mitigation measures are required.	Less than significant
NOISE			
NOI-1 Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than significant	No mitigation measures are required.	Less than significant
NOI-2 Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than significant	No mitigation measures are required.	Less than significant
TRANSPORTATION			
TRA-1 Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than significant	No mitigation measures are required.	Less than significant

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
TRA-2 Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less than significant	No mitigation measures are required.	Less than significant
TRA-3 Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than significant	No mitigation measures are required.	Less than significant
TRIBAL CULTURAL RESOURCES			
TCR-1 Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	No impact	No mitigation measures are required.	No impact
TCR-2 Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native	Potentially significant	**TCR-A Tribal Cultural Resources Worker Environmental Awareness Plan:** Due to the potential to encounter unanticipated resources, prior to the beginning of ground-disturbing activities by the construction crew, the construction crew associated with ground-disturbing activities shall be informed of the tribal cultural resource's values involved and of the regulatory protections afforded those resources. The crew shall also be informed of procedures relating to the discovery	Less than significant

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		of unanticipated resources that require evaluation as potential tribal cultural resources. The crew shall be cautioned not to collect artifacts, and directed to inform a construction supervisor and the onsite Native American monitor in the event that tribal cultural resources are discovered during the course of construction. The initial training shall be conducted by the on-site Native American monitor and can be incorporated into the proposed project's construction safety training or in conjunction with the Worker Environmental Awareness Program for Archaeological Resources. The on-site monitor shall administer supplemental briefing to all new construction personnel, prior to their commencement of earth-moving construction activities. **TCR-B Tribal Cultural Resources Monitoring:** Due to the potential to encounter unanticipated resources, Native American monitoring shall be conducted by a qualified Native American monitor representing tribes traditionally and culturally affiliated with the geographic area as identified by the Native American Heritage Commission. The qualified Native American monitor shall be present for all ground-disturbing activities that have the potential to encounter tribal cultural resources. Ground-disturbing activities include, but are not limited to, geotechnical boring, boring, trenching, grading, and excavating. The Native American monitor shall observe ground-disturbing activities in all areas with potential to contain significant tribal cultural resources. These locations are anticipated to include the east and west side of the project site, where geologic maps indicate Holocene deposits exist. The tribal cultural monitor shall observe ground-disturbing activities, maintain logs of all	

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		activities monitored, and will make documentation available to the City and all consulting Native American parties who request a record of the logs. If the tribal monitor determines the sensitivity for tribal cultural resources is low, then monitoring may be reduced or eliminated at the discretion of the tribal monitor in consultation with the consulting tribes. **TCR-C Tribal Cultural Resources Inadvertent Discovery:** If resources of potential Native American origin are identified as a result of excavations, or if other resources identified by the Native American monitor as potentially having tribal significance are located in the course of proposed project's excavations, all work within 100 feet be halted until the consulting tribes are notified of the findings and make recommendations. Native American materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). If the resource is considered significant by the consulting tribes, then the City shall determine the resource constitutes a tribal cultural resource, and avoidance shall be the preferred means of treatment. If avoidance is not feasible then the City shall determine mitigation measures as appropriate in consultation with the qualified archaeologist and consulting tribes. **TCR-D Human Remains Inadvertent Discovery:** If human remains are encountered during ground disturbing activities, all work within 100 feet of the remains shall be halted and the County Coroner notified immediately. If human remains are found, the consulting	

Table ES-1: Summary of Project Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		tribes, regardless of whether they are designated most likely descendant, shall be given the opportunity to comment on the treatment plan and informed of findings. If human remains are determined to be of Native American origin, there shall be no pictures taken or testing done on Native American human remains. Tribal representatives will rebury the Native American human remains and associated funerary objects with the appropriate dignity either in accordance with the recommendations of the most likely descendent, if available, or in the project vicinity at a location agreed upon between the tribe and the City, where the reburial would be accessible to tribal members in perpetuity and would not be subject to further disturbance. The discovery and reburial shall be kept confidential and secure to prevent any further disturbance.	

CHAPTER 1
INTRODUCTION

This Environmental Impact Report (EIR) has been prepared to evaluate potential environmental effects that would result from implementation of the proposed Martinez Terminal Rail Restoration Project (proposed project). This EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (California Public Resources Code Section 21000 et. seq., as amended) and its implementing guidelines (California Code of Regulations, Title 14, Section 15000 et. seq.). The City of Martinez (City) is the lead agency responsible for compliance with CEQA for the proposed project, and the Project Applicant is TransMontaigne Partners LLC.

1.1 Purpose of the EIR

CEQA requires preparation of an EIR when there is substantial evidence supporting a fair argument that a proposed project may have a significant effect on the environment. The purpose of an EIR is to provide decision makers, public agencies, and the general public with an objective and informational document that fully discloses the environmental effects of a proposed project. The EIR process is intended to facilitate the evaluation of potentially significant direct, indirect, and cumulative environmental impacts of a proposed project, and to identify feasible mitigation measures and/or alternatives that might reduce or avoid the project's significant effects. In addition, CEQA specifically requires that an EIR identify those adverse impacts determined to remain significant, even after the incorporation of mitigation measures.

As the lead agency for the proposed project, the City is required to consider the information in the EIR, along with any other relevant information, in making its decisions about the project. Although an EIR does not determine the ultimate decision that will be made regarding implementation of a project, CEQA requires lead agencies to consider the information in the EIR and make findings regarding each significant effect identified therein. The City has sole authority to consider and certify the Final EIR, approve the proposed project, and adopt a Mitigation Monitoring and Reporting Program, Findings of Fact, and Statement of Overriding Considerations, if warranted. Other agencies may also use this EIR in their review and approval processes, as indicated in Chapter 2, Project Description.

1.2 Overview of the Proposed Project

The project site is located at the southern boundary of the existing Martinez Terminal industrial property located at 2801 Waterfront Road in the City of Martinez. The proposed project would reestablish a former rail line on the south side of the existing Martinez Terminal, connecting to the existing Union Pacific Railroad (UPRR) railroad tracks south of Waterfront Road. The rail spur would be located within the existing Martinez Terminal property and within UPRR right-of-way (ROW). The project would include construction of approximately 3,850 linear feet of new track, with a lead track of approximately 1,900 feet, and three operating industry tracks of approximately 650 feet each. These tracks would hold train cars for the transport of a range of petroleum-based and renewable products, feed stocks, and blend stocks commodities, similar to current operations at the terminal. Ancillary improvements would be implemented at the Martinez Terminal to support operation of the reestablished rail spur, including the installation of piping, a pumping system, and other associated improvements. Additionally, a stormwater drainage and secondary containment system would be installed.

1.3 CEQA Environmental Process

1.3.1 Notice of Preparation and Initial Study

In accordance with the CEQA Guidelines, an Initial Study was prepared to determine if the proposed project could have the potential to cause significant adverse environmental impacts. Based on the conclusions of the Initial Study, a Notice of Preparation (NOP) was distributed for the proposed project on December 18, 2023, to notify responsible and trustee agencies, stakeholders, and other interested parties that the City planned to prepare a Draft EIR, and to request input regarding the scope and content of the environmental analysis and information to be included in the Draft EIR. The NOP and Initial Study were circulated for a 30-day comment period beginning on December 18, 2023, and ending on January 19, 2024. The NOP was sent to approximately 50 agencies, stakeholders, and other interested parties. Additionally, the NOP was published in the Contra Costa Times newspaper on December 18, 2023. The NOP and Initial Study were also made available for review online at: https://info.haleyaldrich.com/martinez-rail-restoration. Hardcopies were made available for review at the City's office at 525 Henrietta Street during regular business hours.

A public scoping meeting for the proposed project was held to obtain input on the scope of the contents of the EIR. The meeting consisted of a virtual meeting hosted on the Zoom platform on January 9, 2024. One individual attended the virtual meeting. A total of three written comment letters were received from public agencies and an interested party during the 30-day comment period. The NOP, Initial Study, and all comments received on the NOP and Initial Study are provided in Appendix A.

1.3.2 Draft EIR

The City of Martinez filed a Notice of Completion with the Governor's Office of Land Use and Climate Innovation (formerly Planning and Research), State Clearinghouse, indicating that this Draft EIR has been prepared and is available for review. A Notice of Availability of the Draft EIR has been distributed to agencies, organizations, and interested parties, during a public review and comment period in accordance with Section 15087 and Section 15105 of the CEQA Guidelines. The Draft EIR is being circulated for review and comment for 45 days from April 2, 2025, to May 16, 2025. During the 45-day review period, an electronic version of the Draft EIR is available for public review at the following website: www.cityofmartinez.org/railrestoration and a hard copy of the Draft EIR is available at the following location:

City of Martinez
Public Works Department
525 Henrietta Street
Martinez, CA 94533

Written comments related to the information presented in the Draft EIR should be submitted in writing by 11:59 pm on May 16, 2025, via mail or email:

Mail: Martinez Terminal Rail Restoration Project EIR Comment
City of Martinez
Public Works Department
525 Henrietta Street
Martinez, CA 94533
Attn: Joe Enke, Public Works Director

Email: jenke@cityofmartinez.org

Please include “Martinez Terminal Rail Restoration Project EIR Comments” in the email subject line.

1.3.3 Final EIR/Project Approval

Following the close of the 45-day review period for the Draft EIR, all comments received will be included in the project’s administrative record for consideration as part of the proposed project approval process. In response to comments received, the Draft EIR text will be updated, as necessary, and written responses will be prepared for comments received that raise CEQA-related environmental issues regarding the proposed project in accordance with Section 15088(c) of the CEQA Guidelines. The responses will be published in the Final EIR. As required by California Public Resources Code Section 21092.5 and Section 15088(b) of the CEQA Guidelines, written responses to comments submitted by public agencies will be provided to those agencies for review at least 10 days prior to the consideration of certification of the EIR. The EIR will be considered by the City Council in a public meeting before certifying the document and making a final decision whether or not to approve the proposed project.

1.3.4 Adoption of a Mitigation Monitoring and Reporting Program

In accordance with Section 15097 of the CEQA Guidelines, a lead agency is required to adopt a program for monitoring mitigation measures required to reduce or eliminate significant environmental effects resulting from the proposed project. The Mitigation Monitoring and Reporting Program (MMRP) will be prepared following preparation of the Final EIR so that it reflects any changes or revisions to mitigation measures made in response to public comments on the Draft EIR. The MMRP will be submitted to the City along with the Final EIR prior to consideration of the proposed project for approval. Upon approval of the project, the lead agency will be responsible for the implementation of the MMRP.

1.4 Organization of the EIR

This Draft EIR is organized as follows:

Executive Summary: provides an overview of the information provided in detail in subsequent chapters. It consists of an introduction; a brief description of the proposed project; a discussion of issues raised by the public and agencies relative to the project construction and operations; and a table that summarizes the potential environmental impacts in each issue area, the significance determination for those impacts, mitigation measures, and significance of impacts after mitigation.

Chapter 1, Introduction: provides a description of the purpose of the EIR, a brief project overview a description of the CEQA process, and a description of the organization of the EIR.

Chapter 2, Project Description: provides a description of the proposed project, including project objectives. This chapter also includes a description of the public agency actions related to the proposed project.

Chapter 3, Environmental Setting, Impacts, and Mitigation Measures: describes for each environmental resource area the relevant regulatory framework; existing environmental setting; methodology and approach to the analysis; thresholds of significance; evaluation of impacts that would result from project implementation; applicable mitigation measures that would eliminate or reduce any identified significant impacts; impact level of significance after mitigation; and cumulative impacts, if applicable.

Based on the nature and scope of the proposed project, the evaluation contained in the Initial Study, and the comments received during the public scoping period, the discussion in Chapter 3 is organized into those 11 environmental resource areas where there is potential for the proposed project to result in significant environmental effects. The 11 resource areas analyzed in Chapter 3 include the following:

- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Transportation
- Tribal Cultural Resources

Chapter 4, Other CEQA Considerations: presents the other mandatory CEQA sections, including significant unavoidable impacts, significant and irreversible environmental changes, and growth-inducing impacts.

Chapter 5, Alternatives: describes the alternatives development process and evaluates the comparative merits of a reasonable range of project alternatives. This chapter describes the analysis and rationale for selecting the range of alternatives discussed in the EIR and identifies the alternatives considered by the City that were rejected from further detailed analysis during the planning process. Chapter 5 also includes a required discussion of the environmental effects of a No Project Alternative and identifies the environmentally superior alternative.

Chapter 6, List of Preparers: identifies organizations and persons consulted and a list of preparers of this EIR.

Chapter 7, References: provides a list of reference materials used in the preparation of this EIR.

CHAPTER 2
PROJECT DESCRIPTION

This chapter provides a description of the proposed project, including a description of the project location and setting; existing operations; project objectives; the proposed project characteristics and construction and operations scenarios; intended uses of the EIR; and a listing of the permits and approvals that would likely be required to implement the proposed project.

2.1 Overview of the Project

The Project Applicant, TransMontaigne Partners LLC, proposes to implement the Martinez Terminal Rail Restoration Project (proposed project) to reestablish a former rail line on the south side of the existing Martinez Terminal in the City of Martinez (City), connecting to the existing Union Pacific Railroad (UPRR) railroad tracks south of Waterfront Road. The rail spur would be located within the existing Martinez Terminal property and within UPRR right-of-way (ROW). The project would include construction of approximately 3,850 linear feet of new track, with a lead track of approximately 1,900 feet, and three operating industry tracks of approximately 650 feet each. These proposed tracks would hold train cars for the transport of a range of petroleum-based and renewable products, feed stocks, and blend stocks commodities. Currently, these products arrive at the Martinez Terminal via wharf or pipeline. Implementation of the proposed project would reestablish rail service to the project site.

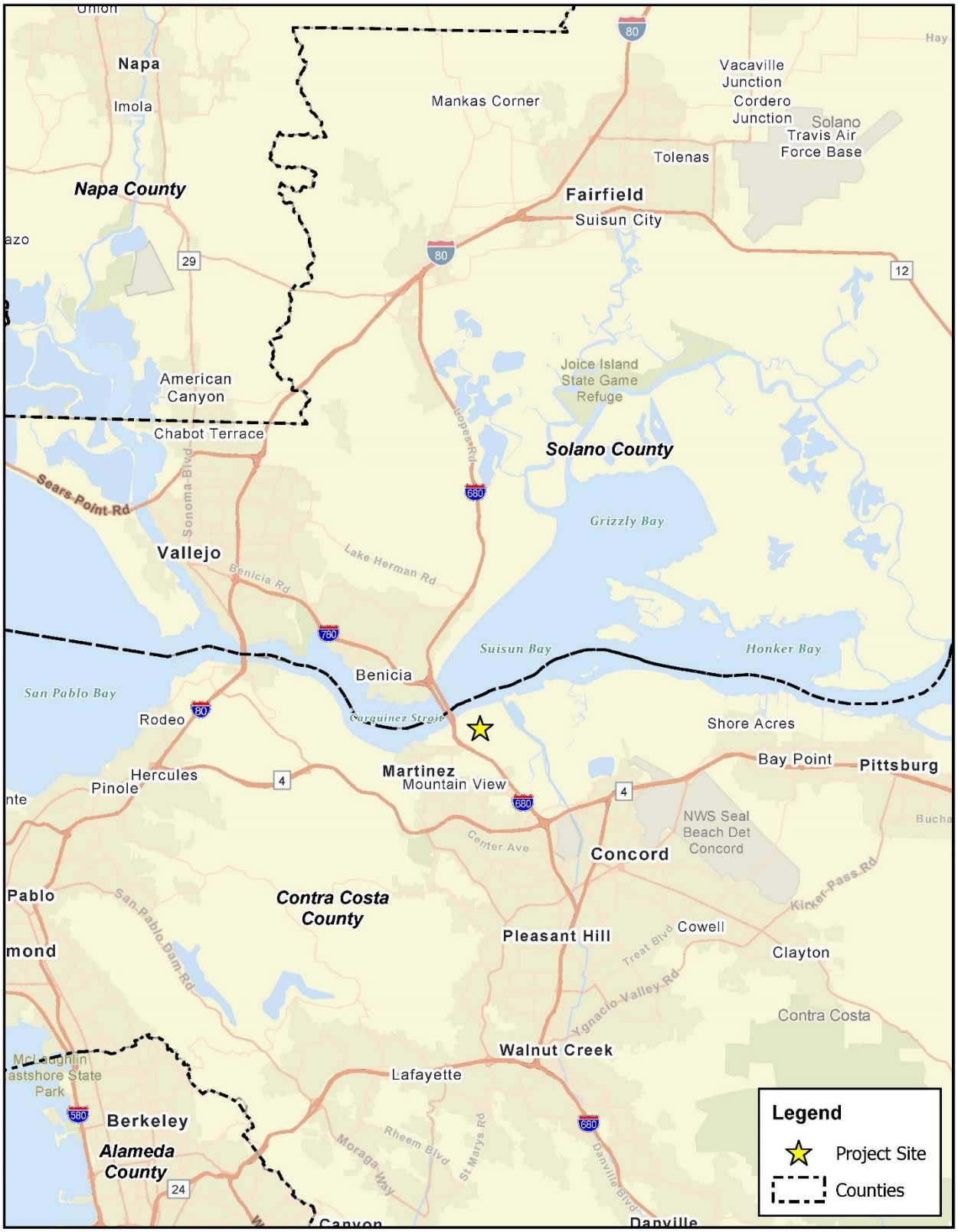
2.2 Project Location and Setting

2.2.1 Regional Context

The project site is located in the City of Martinez in northern Contra Costa County. The City is located approximately nine miles northeast of Oakland and approximately 20 miles northeast of San Francisco. The City is located on the southern shore of the Carquinez Strait, a tidal waterway that connects Suisun Bay on the east with San Pablo Bay on the west. Industrial uses associated with petroleum product refinery and rail and ship transportation infrastructure are concentrated in the northeastern portion of the City adjacent to the Carquinez Strait, as this waterway provides access to shipping routes in and out of the San Francisco Bay. The Martinez Terminal is located at 2801 Waterfront Road within the industrial properties at the eastern boundary of the City on the southern shore of the Carquinez Strait. Martinez is generally bounded by the Carquinez Strait on the north; the unincorporated communities of Avon, Maltby, and Vine Hill on the east; the City of Pleasant Hill on the south; and the unincorporated communities of Glen Frazer and Alhambra Valley on the west. Figure 2-1 shows the project site in a regional context.

2.2.2 Existing Project Site

The project site is located at the southern boundary of the existing Martinez Terminal industrial property. The project site comprises approximately 2.7 acres along the southern boundary of the Martinez Terminal and extends south of Waterfront Road to the existing UPRR tracks. The project would be situated within the Martinez Terminal property and within UPRR ROW, with Waterfront Road bisecting the project site. The project site is bounded by the northern portion of the Martinez Terminal property on the north, industrial and undeveloped lands on the east, the UPRR ROW on the south, and State lands and tidelands on the west. Figure 2-2 shows the location of the project site.

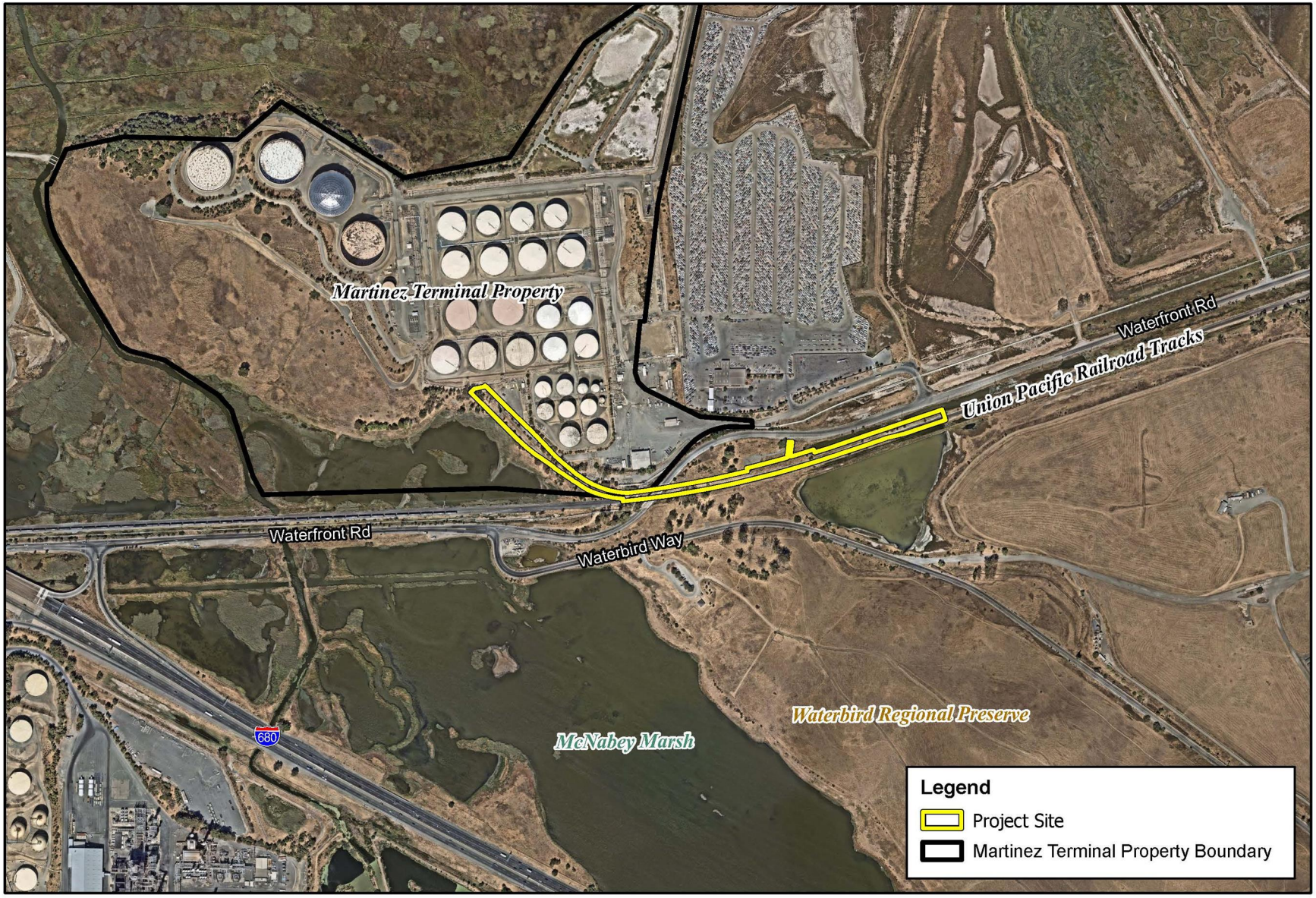


MARTINEZ TERMINAL RAIL RESTORATION PROJECT

Michael Baker INTERNATIONAL

Regional Location Map

Figure 2-1



MARTINEZ TERMINAL RAIL RESTORATION PROJECT

Michael Baker INTERNATIONAL

0 350 700 US Feet

Source: Esri, JMA Civil, TransMontaigne, Esri Hybrid Reference Layer, Nearmap Imagery 2025

Project Location Map

Figure 2-2

The eastern portion of the project site is located within the UPRR corridor and contains the UPRR Mococo Rail Line, which consists of a single spur of track on a raised gravel bed. This rail line provides service to 15 trains daily, 13 of which are commuter trains and two of which are freight trains.

The western portion of the project site is located in the southern portion of the 255-acre Martinez Terminal property, located at 2801 Waterfront Road. The Martinez Terminal property is currently developed with pipelines, storage tanks, office space, and related facilities associated with its operation as a storage and transportation hub for petroleum and renewable products and related feed and blend stocks. The existing Martinez Terminal has a single wharf at the northern end of the property, where marine vessels dock.

Vehicular access to the Martinez Terminal property is provided via an automated slide gate driveway located off of Waterfront Road. Local roadway access to the project site is provided via Waterfront Road, which bisects the project site, and Marina Vista Avenue, which is the western continuation of Waterfront Road. Regional access to the project site is provided via Interstate 680 (I-680), approximately 0.6 miles west of the project site. Other access to the property is provided at the wharf where material is moved via ships.

The project site is designated IM for industrial and manufacturing uses in the City's General Plan 2035 and zoned H-I (Heavy Industrial) in the City's Zoning Code.[1] The H-I Zone allows for petroleum and petroleum products refining including gasoline, kerosene, naphtha, and oil; petroleum products storage; and railroad freight stations, repair shops, and yards.[2] The project site is also zoned ECD (Environmental Conservation District) Zone because of its location near the Carquinez Strait. The ECD Zone has been established to implement the provisions of the open space, conservation, seismic safety and scenic roadway elements of the General Plan; to provide for the accommodation of a level of development consonant with the protection of environmental values in those portions of the City with high natural environmental qualities; and to protect the health, safety and welfare of residents of the City through the protections and preservation of the community environment.[3]

2.2.3 Surrounding Land Uses

The project site is located in an industrial area in the northeastern portion of the City that is surrounded by extant, remnant, and former marshlands connected to the Peyton Slough to the north, Pacheco Slough delta to the east, and Peyton Marsh/McNabney Marsh to the west. This area also contains several wildlife areas including the Waterbird Regional Preserve approximately 380 feet to the south, Point Edith Wildlife Area approximately 1.5 miles northeast, and Grizzly Island Wildlife Area approximately 9.2 miles northeast.

North of the project site on the northern shore of the Carquinez Strait is the City of Benicia. The southern portion of Benicia close to the shore contains similar industrial uses to those at and directly adjacent to the project site, including rail and ship transportation and petroleum product refinery, storage, and transportation.

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1 City of Martinez Planning Department, CommunityView Maps, available at: http://maps.digitalmapcentral.com/production/vecommunityview/cities/Martinez/index.aspx, accessed March 5, 2025.

2 City of Martinez Municipal Code, Title 22 (Zoning Code), Section 22.18.040 HI Heavy Industrial District – Permitted Uses.

3 City of Martinez Municipal Code, Title 22 (Zoning Code), Chapter 22.24 ECD Environmental Conservation Districts, Section 22.24.020 Purposes.

Located west of the project site, north of Waterfront Road and east of I-680 is a 120-acre industrial property that contains the ECO Services Plant and Process Unit, which processes, uses, and handles regulated substances associated with petroleum product refinery and gasoline manufacturing processes. Southwest of the project site and west of I-680 is the 860-acre Martinez Refinery, an oil and gas refinery owned and operated by PBF Energy. The area west of the refinery contains the residential and commercial properties that make up downtown Martinez approximately two miles west of the project site. West of Martinez is an area of unincorporated farmlands and small residential communities surrounded by natural open spaces, such as Briones Regional Park, Kennedy Grove Regional Recreation Area, Sobrante Ridge Regional Park, and Wildcat Canyon Regional Park. Further west are the communities on the east side of the San Francisco Bay, including the cities of Richmond, Berkeley, Emeryville, and Oakland.

South of Martinez are the unincorporated communities of Pacheco and Pleasant Hill, and the City of Concord. These areas are characterized by low-density residential neighborhoods and neighborhood-serving commercial, retail, institutional, and public facility uses. Additionally, the Buchanan Field Airport is located approximately 2.8 miles southeast of the project site.

East of the project site are undeveloped lands and industrial uses, including the Tesoro Golden Eagle Refinery. East of the refinery, along the southern shore of the Carquinez Strait is the 761-acre Point Edith Wildlife Area, which is a tidal area consisting of sloughs and small ponds.[4] East of the wildlife area is a rail yard; further to the east is the eastern extent of Suisun Bay, which is fed by the outlets of the Sacramento River and the San Joaquin River.

2.3 Existing Martinez Terminal Operations

The Martinez Terminal, in its current iteration as a storage and transportation hub for petroleum and renewable products and related feed and blend stocks, has been in operation since the first set of tanks was constructed in 1973. However, rail service to the site was originally established in the early 1900s and the previous rail spur was idled and decommissioned in the late 1990s/early 2000s.

The Martinez Terminal operates 24 hours per day, seven days per week with 16 employees. The terminal is divided into four distinct tank farms and pumping areas, which are connected to each other by piping manifolds. The tank farms contain a total of 29 above ground storage tanks of varying sizes and capacities, depending on the types of products stored. Several electric powered pumps are located throughout the Martinez Terminal property to move products to and from the above ground storage tanks via pipelines that connect the terminal to the dock and to other customers. The existing storage capacity at the facility is approximately 5 million barrels (bbls).[5] The facility operates under a City of Martinez Conditional Use Permit, which allows a product throughout limit of up to 70 million bbls per year. Under existing conditions, the facility handles a total throughput of up to approximately 50 million bbls per year.

Currently, products arrive at the Martinez Terminal via wharf or pipeline. At the wharf, products are received from vessels and barges, which contain pumping capabilities to convey products into the above-ground storage tanks. Products received via pipeline arrive from other area terminals or refineries through one of the three existing facility products pipelines. Products are stored and aggregated onsite until scheduled batch shipments, at which time they are either pumped from

[4] California Department of Fish and Wildlife, Point Edit Wildlife Area, Description, available at https://wildlife.ca.gov/Lands/Places-to-Visit/Point-Edith-WA, accessed March 5, 2025.

[5] Barrels, abbreviated bbls, are the units of volume used to measure oil and petroleum products in the oil industry. One barrel is equivalent to approximately 42 U.S. gallons of liquid volume.

the storage tank(s) to a vessel at the wharf or to one the three existing facility products pipelines. Current operations at the wharf consist of ships arriving up to five times per week on average for delivery and receipt of products. Deliveries and receipts at the wharf are from both domestic and international sources, with the majority of deliveries from the wharf going to California and Washington state.

2.4 Project Objectives

The overall purpose of the proposed project is to reestablish the rail spur and associated facilities at the project site to restore the Martinez Terminal to the operational functionality historically available and permitted at the site. Specific objectives related to the overall project purpose include the following:

- Implement facility improvements at the existing terminal to increase functional operational capacity at the project site.
- Minimize the need to extend existing product conveyance infrastructure (i.e., pipelines, pumping systems, etc.) by siting facilities in proximity to existing storage infrastructure.
- Limiting the amount of facility improvements required by relying on existing rail transportation methods.

2.5 Description of the Proposed Project

2.5.1 Proposed Project Characteristics

The proposed project would reestablish the former rail line on the south side of the existing Martinez Terminal, connecting it to the existing UPRR railroad tracks south of Waterfront Road. The proposed project would include construction of approximately 3,850 linear feet of new track, with a lead track of approximately 1,900 feet, and three operating industry tracks of approximately 650 feet each. These tracks would accommodate 21 railcars for transportation of a range of petroleum-based and renewable products, feed stocks, and blend stocks commodities, similar to current operations at the terminal. Trains would deliver material to, or ship from the Martinez Terminal for distribution, and facilities at the Martinez Terminal would be installed and/or upgraded to accommodate these shipments. Material that is unloaded would be transferred from the railcars into storage tanks within the terminal, where it would be aggregated for shipment by marine wharf or pipeline.

The rail spur would cross under the existing Waterfront Road overpass and then head northwesterly into the Martinez Terminal property. The new track would be positioned between the existing bridge columns with applicable pier protection provided. Additionally, retaining walls would be required to provide support on either side of the operating industry tracks in the northwestern portion of the project site. A standard UPRR railroad ditch would be constructed along the new track outside of the terminal to capture and infiltrate storm water runoff from the proposed rail spurs and retain existing drainage patterns. This ditch would facilitate existing runoff patterns and would drain to an existing ponding area. Additionally, drainage systems would be incorporated into the retaining walls and pier protection. These drainage systems would collect runoff flows behind the face of the walls and route them to underdrains leading to a proposed sump within the Martinez Terminal property. Runoff from the northwestern portion of the project site not collected in the underdrains would be collected in a secondary containment system to be cleared of any spill materials. Once cleared, runoff from the secondary containment system would flow to the proposed new sump.

The proposed project would involve the installation of piping, headers, and hose connections at the operating spur area, a pumping system, and an upgraded heating plant with thermal oil and railcar steam generation equipment; conversion of two existing aboveground storage tanks to heated product service; and construction of additional pipeline shipping modifications within the existing terminal. Figure 2-3 shows the conceptual site plan for the proposed project.

2.5.2 Construction Scenario

Construction of the proposed rail spur is anticipated to begin in spring 2026 and take approximately 12 months to complete, concluding in spring 2027. In accordance with the City Noise Ordinance, construction activities would occur between the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, and between the hours of 9:00 a.m. and 5:00 p.m. on weekends and holidays. No work outside of these hours is anticipated.

Contractor parking, stockpiles, equipment staging, and lay-down areas would be located within the existing Martinez Terminal property. Construction vehicles would access the site from I-680 from the Marina Vista interchange and Waterfront Road to avoid traversing downtown Martinez.

Site preparation activities would include excavation and grading of existing soil. Approximately 16,000 cubic yards of soil would be excavated from the project site. The maximum depth of construction related excavation would be approximately 16 feet below the ground surface, with average excavation depths for track areas of five feet below the ground surface. Approximately 2,100 cubic yards of excavated soils would be used as fill material to prepare the site for placement of the tracks. Soils would then be compacted using graders, trucks, and compactors in preparation of installing the new track. The remaining excavated materials would be placed within the Martinez Terminal property. Additionally, vegetation and several ornamental trees within and near the project site would need to be trimmed or removed during site preparation activities.

Following site preparation, existing utilities would be located and protected in place or relocated, if necessary. Pier protection would be installed at the existing bridge columns where the track would cross under the existing Waterfront Road overpass. Additionally, retaining walls would be constructed on either side of the proposed operating industry tracks.

Track Installation

Track construction would include grading, soil compaction and stabilization, placement of sub-ballast material, and installation of rail, ties, and ballast. Track ballast is used to form the rail track bed to allow drainage and to bear the weight of the railcars.

Waterfront Road Pier Protection

Foundational support would be required for the area adjacent to the lead track beneath the Waterfront Road overcrossing. It is anticipated that this support would be provided by drilled, cast-in-place concrete piles. A specialized drill rig would be used to drill into the ground to create the shaft within which the concrete piles would be cast. The concrete piles would have a minimum diameter of approximately 24 inches and would be placed at least 48 inches apart. The piles would be drilled to a depth of at least 5 feet into formational material (i.e., bedrock). Loose materials excavated from the drilled shafts would either be used as fill material onsite or placed within the Martinez Terminal property.

MARTINEZ TERMINAL RAIL RESTORATION PROJECT

Michael Baker INTERNATIONAL

0 250 500 Feet

Source: ESRI, JMA Civil, TransMontaigne

Conceptual Site Plan

Figure 2-3

Retaining Walls

Two retaining walls would be installed to provide support for the three operating tracks in the northwestern portion of the project site. Based on the soil conditions present, it is anticipated that the outside (westernmost) wall would require approximately 58 drilled, cast-in-place concrete piles, which would be installed in a similar manner as described for the Waterfront Road Pier Protection above. The inside retaining wall would consist of soil nails, which involve the installation of reinforcing steel bars (soil nails) that are inserted into drilled holes and grouted in place horizontally at an inclination of 10 to 15 degrees in a grid pattern. Following installation of the soil nails, a drainage membrane would be placed over the exposed ground surface, followed by a layer of reinforced shotcrete, which would be locked into place using locking nuts on each soil nail.

Stormwater Drainage and Containment System

Stormwater runoff from the proposed lead and operating tracks would be collected by pipes and drains and routed to one of three locations, including an existing ponding area, a proposed new sump, or the proposed secondary containment system, which would ultimately drain to the new sump. Drainage pipes would be installed as part of the pier protection beneath the Waterfront Road overcrossing and within the retaining walls to be installed on either side of the operating industry tracks in the northwestern portion of the project site. Both the proposed secondary containment system and the new sump would be installed within the Martinez Terminal property at the southern end of the operating industry tracks. Installation of the secondary containment system and the new sump would occur as part of the excavation and site preparation activities in the northwestern portion of the project site.

Ancillary Improvements

Other improvements associated with the reestablished rail track would include conversion of two existing tanks to heated storage; upgrading the existing heating plant with steam generation equipment; installing pumps, valves, pressure relief devices; extending existing piping connections and infrastructure to reach the railcars on the operating industry tracks; and installation of electrical connections and fire protection systems. Conversion of the two existing tanks to heated storage would involve cleaning and degassing the tanks, repairing coatings as needed, installing a mechanical mixer, and installing insulation material or coating on the tank exterior.

Upgrades to the existing heating plant would be required for heating the railcars stored on the reestablished rail spur. A new thermal oil steam generator would be installed to circulate steam through coils in the railcars to liquify high viscosity products. The new steam generator would use the same types and amounts of fuel, including natural gas and electricity, as the existing heating system at the facility.

Best Management Practices

Resource impact avoidance would be employed during construction of the proposed project, including implementation of the following best management practices (BMPs):

- The proposed project would develop and implement an Erosion Control Plan and Storm Water Pollution Prevention Plan (SWPPP) for construction activities. BMPs associated with these plans may include, but would not be limited to, the following:
    - Minimizing the extent of disturbed areas and duration of exposure;
    - Stabilizing and protecting disturbed areas;

  - Keeping runoff velocities low;
  - Retaining sediment within the construction area;
  - Use of silt fences or straw wattles;
  - Temporary soil stabilization;
  - Temporary drainage inlet protection;
  - Temporary water diversion around the immediate work area; and
  - Minimizing debris from construction vehicles on roads providing construction access.
- In accordance with City of Martinez Municipal Code Section 8.34.030(B), construction activities shall only occur between the hours of 7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on Saturdays, Sundays, and holidays.
- The existing emergency response plan and spill prevention plan that covers the Martinez Terminal would be updated to include the project site and operations associated with the proposed project. As part of the emergency response plan and spill prevention plan project personnel would have available adequate spill containment and cleanup resources on-site at all times and be prepared to contain, control, clean up, and dispose of any potential fuel spill quickly and completely.
- In order to meet the Bay Area Air Quality Management District (BAAQMD) fugitive dust thresholds, the following BAAQMD Basic Construction Best management Practices[6] shall be implemented:
  - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
  - All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
  - All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
  - All vehicle speeds on unpaved roads shall be limited to 15 mph.
  - All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
  - All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 miles per hour.
  - All construction equipment, including their tires, shall be washed off prior to leaving the site.
  - Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.
  - A publicly-visible sign shall be posted with the telephone number and person to contact at City of Martinez regarding dust complaints. This person shall respond and take

[6] Bay Area Air Quality Management District, 2022 CEQA Guidelines, Chapter 5: Project-Level Impacts: Air Quality, Table 5-2: Basic Best Management Practices for Construction-Related Fugitive Dust, April 2022, available at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-5-project-air-quality-impacts_final-pdf.pdf?rev=de582fe349e545989239cbbc0d62c37a&sc_lang=en, accessed March 5, 2025.

corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

- The Project Applicant shall incorporate the following best management practices to reduce GHG emissions, in accordance with the BAAQMD guidance:
  - Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet;
  - Use local building materials (within 100 miles) of at least 10 percent; and
  - Recycle or reuse at least 50 percent of construction waste or demolition materials.
- Prior to construction, the project contractor will be required to develop and implement a Traffic Control Plan (TCP) prepared by a registered Traffic Engineer for all locations where construction activities would affect the existing transportation system. Input and approval of the TCP will be obtained from the City of Martinez prior to construction. Temporary speed limit restrictions will be considered within the construction zone. The TCP will define the use of flaggers, warning signs, lights, barricades, and cones, etc., according to standard guidelines required by the City of Martinez. Further, the contractor will maintain the work site, including traffic control, in a safe condition at all times, even outside of normal work hours. Construction activities completed within public street rights-of-way would require the use of a traffic control service, and any lane closures or traffic control measures would be consistent with those published in the California Joint Utility Traffic Control Manual. Implementing measures contained within the California Joint Utility Traffic Control Manual would facilitate safe passage of both construction vehicles and private vehicles.

2.5.3 Operation Scenario

The reestablished rail spur would be used to bring train cars to the Martinez Terminal property for transfer of contents to and from the above-ground storage tanks. The three approximately 650-linear-feet operating industry tracks would store a total of approximately 21 railcars within the Martinez Terminal property. The railcars could vary in size but would average approximately 60 feet in length with a capacity of approximately 700 bbls. Railcars would typically be on the site for 24 hours at a time before being switched out for a new set. Establishment of the rail service to the project site would not affect existing rail traffic, as the cars would be added to one of the two existing local freight trains currently operating in the area. The freight trains would continue to operate during nighttime hours, consistent with existing operations.

As previously discussed, under existing conditions, the facility handles a total throughput of up to approximately 50 million bbls per year. Implementation of the proposed project would not result in a net increase in the annual throughput of products handled and stored at the Martinez Terminal. Rather, the volume of products that would be transported to and from the facility via the reestablished rail spur would offset the volume of products that are currently transported via pipeline or wharf. Additionally, operation of the proposed project is not anticipated to alter the existing operating hours, and the terminal would continue to operate 24 hours per day, seven days per week. However, the reestablishment of the rail spur and storage of railcars would require an additional two employees over existing operations, resulting in a total of 18 employees at the site.

2.6 Intended Uses of the EIR

Pursuant to CEQA Guidelines Section 15121, an EIR is a public document used by a public agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid environmental damage. As an informational document, an EIR does not advocate for or against approving a project. The main purpose of an EIR is to inform governmental decision makers and the public about potential environmental impacts of a project. This EIR will be used by the City, as the lead agency under CEQA, in making decisions with regard to adoption of the proposed project, the subsequent construction and operation of the project, and the related approvals described herein.

2.7 Required Permits and Approvals

Permits and other use authorizations that may be required to implement the proposed project may include, but may not be limited to, the following:

City of Martinez

- Tree Removal Permit
- Certification by City Council that the EIR was prepared in accordance with CEQA and other applicable codes and guidelines.
- Approval of the project by City Council.

California Public Utilities Commission

- Review in accordance with General Order 88-B: Modifications of an Existing Rail Crossing

Contra Costa County Fire Protection District

- Plan Review

United States Army Corps of Engineers

- Clean Water Act Section 404 - Nationwide Permit 14 Linear Transportation Project

Regional Water Quality Control Board

- Clean Water Act Section 401 – Water Quality Certification
- National Pollutant Discharge Elimination System Permit for storm water management during construction
- Storm Water Pollution Prevention Plan for storm water management during construction

CHAPTER 3
ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

3.0.1 Scope of the Environmental Impact Analysis

This chapter of the Draft Environmental Impact Report (EIR) analyzes the potential environmental impacts of implementation of the proposed project. The scope of the analysis and key attributes of the analytical approach are presented below to assist readers in understanding the manner in which the impact analyses have been conducted in this EIR.

Based on the Notice of Preparation (NOP), Initial Study, and comments received during the scoping period (Appendix A), the following sections in Chapter 3 of this Draft EIR examine in detail the potential environmental impacts associated with implementation of the project for the following environmental resource areas:

- Section 3.1, Air Quality
- Section 3.2, Biological Resources
- Section 3.3, Cultural Resources
- Section 3.4, Energy
- Section 3.5, Geology and Soils
- Section 3.6, Greenhouse Gas Emissions
- Section 3.7, Hazards and Hazardous Materials
- Section 3.8, Hydrology and Water Quality
- Section 3.9, Noise
- Section 3.10, Transportation
- Section 3.11, Tribal Cultural Resources

3.0.2 Overview of the Impact Analysis

Each environmental resource area in Section 3.1 through Section 3.11 is discussed in the following manner.

- **Regulatory Setting** identifies the applicable federal, State, regional, and/or local regulations.
- **Environmental Setting** includes a description of the existing physical environmental conditions at the time of publication of the NOP, which establishes the baseline conditions. The baseline conditions are tailored specifically for the environmental resource area discussed in each section and provide the context for assessing the type and extent of the potential environmental effects of the project.
- **Methodology** describes the sources or methods utilized in the preparation of the impact analysis for each environmental resource area. This section identifies the thresholds of significance, or standards, used to determine whether impacts should be considered significant. Additionally, thresholds that were scoped out as part of the Initial Study are identified. The thresholds of significance are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

- **Environmental Impact Analysis** includes the impact analysis, which presents evidence, based on scientific and factual data, on how construction and operation of the proposed project would affect the existing conditions, potentially resulting in significant impacts on the environment, including direct or reasonably foreseeable indirect effects. The exact magnitude, duration, extent, frequency, range, and other parameters of a potential impact are ascertained to the extent possible to provide facts in support of the impact conclusion. The following describes the four possible categories of impact significance used in this EIR:
    - *No Impact*: the project would not have a measurable impact on the environment;
    - *Less Than Significant Impact*: the project would not result in a substantial adverse change in the environment;
    - *Less Than Significant Impact with Mitigation Incorporated*: the project would have the potential to generate a substantial adverse impact on the environment, but the impact could be avoided or reduced to a less than significant level with implementation of mitigation measures; and
    - *Significant Unavoidable Impact*: the project would cause a substantial adverse impact on the environment that cannot be feasibly avoided or mitigated to a less than significant level.
- **Mitigation Measures** identify actions that can reduce or avoid a potentially significant impact identified in the analysis. Existing regulations, policies, or best practices applicable to the project are considered a part of the existing regulatory environment and are not considered or included in mitigation. Mitigation measures are those feasible, project-specific measures which are required, in addition to compliance with existing regulatory requirements, to reduce potentially significant impacts. Pursuant to CEQA Guidelines Section 15091(a)(2), in addition to measures that the lead agency has sole authority to implement, mitigation can also include measures that are the responsibility and jurisdiction of another public agency.
- **Level of Significance after Mitigation** indicates what effects remain after the implementation of mitigation measures and whether the residual effects are considered significant. In a case where a mitigation measure(s) would avoid or reduce a significant impact to a level that is less than significant, a determination would be made that the residual impact would be less than significant. In a case where impacts cannot be mitigated to a less than significant level, even with the inclusion of mitigation measures, the residual impact would remain significant. A determination that the residual impact would remain significant is used to identify Significant Unavoidable Impacts, pursuant to CEQA Guidelines Section 15126.2(b). To approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations at the time of EIR certification. In adopting such a statement, the lead agency must find that it has reviewed the EIR, balanced the benefits of the project against its significant effects, and concluded that the benefits of the project outweigh the unavoidable adverse environmental effects, and thus, the adverse environmental effects may be considered “acceptable” (*CEQA Guidelines Section 15093 [a]*).
- **Cumulative Impacts** requires the evaluation of a project’s impacts in the context of other projects that may affect the same resources, potentially leading to compounded or increased effects. Specifically, the cumulative impact analysis evaluates whether the incremental impacts of a project, when considered together with the impacts of other past, present, and reasonably foreseeable future projects, may compound or increase

environmental effects, resulting in a considerable contribution to cumulatively significant effects. Cumulative impacts are further discussed in Section 3.0.3 below.

3.0.3 Cumulative Impacts

CEQA requires that in addition to project impacts, an EIR must discuss cumulative impacts. According to Section 15355 of the CEQA Guidelines, cumulative impacts refer to:

> *"Two or more individual effects which, when considered together are considerable or which compound or increase other environmental effects. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of a project when added to other closely related past, present, and reasonably foreseeable probably future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."*

Additionally, Section 15130(a) of the CEQA Guidelines States:

> *"An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable… When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR… An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant…if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact."*

Pursuant to Section 15130(b)(1) of the CEQA Guidelines, cumulative impacts may be analyzed by considering a list of past, present, and probable future projects producing related or cumulative impacts. Table 3-1, Related Projects, lists the City- and County-approved and reasonably foreseeable projects in the vicinity of the proposed project as of the release of the NOP. Depending on the environmental resource area, the cumulative impact analysis may use either source. The scale or geographic scope of related projects varies for each impact category. Some impacts, such as geology and soils, are considered localized or site specific, while others may have impacts outside the project site boundaries, such as regional air quality.

Table 3-1: Related Projects

Project Name	Project Location	Project Description	Status
Martinez Refinery Renewable Fuels Project	150 Solano Way	Conversion of the existing Martinez Refinery facility from the processing of crude oil, to the processing of renewable feedstocks.	Approved.
Amare Apartment Homes Project	Arnold Drive/State Route 4	6 buildings with a total of 183 dwelling units and on-site amenities.	Public hearing occurred on October 11, 2022.
Traditions at the Meadow (formerly Pine Meadow)	451 Vine Hill Way	65 single-family residential lots and four lots to be designated as open space and recreational facilities.	Building permits issued.

Sources: City of Martinez, Planning Applications, https://www.cityofmartinez.org/departments/planning/development-projects, accessed on April 25, 2024; Contra Costa County, Major Planning Projects Under Consideration, https://www.contracosta.ca.gov/7605/Major-Planning-Projects-Under-Considerat; accessed on April 25, 2024.

3.0.4 Impacts Found Not to be Significant

Based on the findings of the Initial Study, it was determined that potential impacts related to aesthetics; agriculture and forestry resources; land use and planning; mineral resources; population and housing; public services; recreation; utilities and service systems; and wildfire are not likely to be significant under CEQA and the CEQA Guidelines (California Public Resources Code, Section 21000 et seq.; California Code of Regulations. Title 14, Section 15000 et seq.). Therefore, these issue areas are not further analyzed in the EIR. A summary of the impacts found not to be significant is included in Chapter 4, Other CEQA Considerations, of this EIR.

3.1 AIR QUALITY

This section presents an analysis of the potential impacts on air quality associated with implementation of the proposed project. This section estimates the air pollutant emissions generated by construction and operation of the proposed project and evaluates whether the proposed project would conflict with or obstruct implementation of the air pollution reduction strategies set forth in the Bay Area Air Quality Management District's (BAAQMD) 2017 Clean Air Plan. The analysis of project-generated air emissions focuses on whether the proposed project would cause an exceedance of an ambient air quality standard or BAAQMD significance thresholds. This section is based in part on the Air Quality, Energy, and Greenhouse Gas Emissions Calculations included as Appendix B.

3.1.1 Regulatory Setting

Federal

Federal Clean Air Act

The federal Clean Air Act was first enacted in 1970 and amended in 1977 and 1990 for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. The US Environmental Protection Agency has set primary and secondary National Ambient Air Quality Standards (NAAQS) for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter or particulate matter 10 microns or smaller in diameter (PM_{10}), and fine particulate matter or particulate matter 2.5 microns or smaller in diameter ($PM_{2.5}$), and lead (Pb). Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. Table 3.1-1 below lists the current federal and State standards for regulated pollutants.

State

State Implementation Plan

The Federal Clean Air Act Amendments require that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. In California, the SIP is a collection of documents that set forth the State's strategies for achieving the NAAQS and California Ambient Air Quality Standards (CAAQS), including a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, state regulations, and federal controls. The California Air Resources Board (CARB) is the lead agency for all purposes related to the SIP under State law. Local air districts are responsible for preparing and implementing air quality attainment plans for pollutants for which the local air district is in non-compliance, and the plans are incorporated into the SIP.

California Clean Air Act

The California Clean Air Act, enacted in 1988, developed the CAAQS, which are generally more stringent than the NAAQS. The California Clean Air Act requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with the CAAQS. These standards, included in the NAAQS in Table 3.1-1, apply to more pollutants than the NAAQS. In addition to the criteria pollutants, the CAAQS have been established for visibility-reducing particles, sulfates (SO_4^{2-}), hydrogen sulfide (H_2S), and vinyl chloride.

While the US Environmental Protection Agency is the federal agency designated to administer air quality regulations, CARB is the State equivalent in the California Environmental Protection Agency. As with the Federal Clean Air Act, the California Clean Air Act also designates areas

within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the California Clean Air Act, areas designated as nonattainment are those that do not meet (or that contribute to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant. Areas designated as attainment are those that meet the national primary or secondary ambient air quality standard for the pollutant.

Table 3.1-1: Federal and California Ambient Air Quality Standards

Pollutant	Averaging Time	California[a]		Federal[b]	
		Standard[c]	Attainment Status	Standards[c,d]	Attainment Status
Ozone (O_3)	1 Hour	0.09 ppm (180 μg/m^3)	Nonattainment	N/A	N/A[e]
	8 Hours	0.070 ppm (137 μg/m^3)	Nonattainment	0.070 ppm (137 μg/m^3)	Nonattainment
Respirable Particulate Matter (PM_{10})	24 Hours	50 μg/m^3	Nonattainment	150 μg/m^3	Attainment/ Maintenance
	Annual Arithmetic Mean	20 μg/m^3	Nonattainment	N/A	N/A
Fine Particulate Matter ($PM_{2.5}$)	24 Hours	No Separate State Standard		35 μg/m^3	Nonattainment
	Annual Arithmetic Mean	12 μg/m^3	Nonattainment	12.0 μg/m^3	Nonattainment
Carbon Monoxide (CO)	8 Hours	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Attainment/ Maintenance
	1 Hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Attainment/ Maintenance
Nitrogen Dioxide (NO_2)[e]	Annual Arithmetic Mean	0.030 ppm (57 μg/m^3)	N/A	53 ppb (100 μg/m^3)	Attainment/ Maintenance
	1 Hour	0.18 ppm (339 μg/m^3)	Attainment	100 ppb (188 μg/m^3)	Attainment/ Maintenance
Lead (Pb)[f,g]	30 days Average	1.5 μg/m^3	Attainment	N/A	N/A
	Calendar Quarter	N/A	N/A	1.5 μg/m^3	Nonattainment
	Rolling 3-Month Average	N/A	N/A	0.15 μg/m^3	Nonattainment
Sulfur Dioxide (SO_2)[h]	24 Hours	0.04 ppm (105 μg/m^3)	Attainment	0.14 ppm (for certain areas)	Unclassified/ Attainment
	3 Hours	N/A	N/A	N/A	N/A
	1 Hour	0.25 ppm (655 μg/m^3)	Attainment	75 ppb (196 μg/m^3)	N/A
	Annual Arithmetic Mean	N/A	N/A	0.30 ppm (for certain areas)	Unclassified/ Attainment
Visibility-Reducing Particles[i]	8 Hours (10 a.m. to 6 p.m., PST)	Extinction coefficient = 0.23 km@<70% RH	Unclassified	No Federal Standards	
Sulfates	24 Hour	25 μg/m^3	Attainment		

Table 3.1-1: Federal and California Ambient Air Quality Standards

Pollutant	Averaging Time	California[a]		Federal[b]	
		Standard[c]	Attainment Status	Standards[c,d]	Attainment Status
Hydrogen Sulfide (H_2S)	1 Hour	0.03 ppm (42 $\mu g/m^3$)	Unclassified		
Vinyl Chloride[f]	24 Hour	0.01 ppm (26 $\mu g/m^3$)	N/A		

Notes: $\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion; km = kilometer(s); RH = relative humidity; PST = Pacific Standard Time; N/A = Not Applicable

a. California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1- and 24-hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California Ambient Air Quality Standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b. National standards (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

c. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

e. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of ppb. California standards are in ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

f. CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

g. The national standard for Pb was revised on October 15, 2008, to a rolling 3-month average. The 1978 Pb standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

h. On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

i. In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: California Air Resources Board, *Ambient Air Quality Standards Chart,* http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, May 4, 2016.

Regional

Bay Area Air Quality Management District

The BAAQMD attains and maintains air quality conditions in the San Francisco Bay Area Air Basin (SFBAAB) through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The BAAQMD's clean air strategy includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The BAAQMD also inspects stationary sources of air pollution and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the Federal Clean Air Act, the Clean Air Act Amendments, and the California Clean Air Act.

Air Quality Attainment Plans

The BAAQMD is responsible for preparing plans to attain ambient air quality standards in the SFBAAB. The BAAQMD prepares ozone attainment plans for the national ozone standard and clean air plans for the California standard, both in coordination with the Metropolitan Transportation Commission and the Association of Bay Area Governments (ABAG).

With respect to applicable air quality plans, the BAAQMD prepared the 2017 Clean Air Plan to address nonattainment of the national ozone standard in the air basin. The 2017 Clean Air Plan defines a control strategy that the BAAQMD and its partners will implement to (1) reduce emissions and decrease ambient concentrations of harmful pollutants; (2) safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily impacted by air pollution; and (3) reduce GHG emissions to protect the climate. It is important to note that, in addition to updating the previously prepared ozone plan, the 2017 Clean Air Plan also serves as a multipollutant plan to protect public health and the climate. BAAQMD believes that an integrated and comprehensive approach to planning is critical to respond to air quality and climate protection challenges in the years ahead. In its dual roles as an update to the State ozone plan and a multipollutant plan, the 2017 Clean Air Plan addresses four categories of pollutants, including ground-level ozone and its key precursors, reactive organic gases (ROG) and nitrogen oxides (NO_X); particulate matter: primary $PM_{2.5}$, as well as precursors to secondary $PM_{2.5;}$ air toxics; and greenhouse gases (GHGs)

The 2017 Clean Air Plan provides local guidance for the SIP, which provides the framework for air quality basins to achieve attainment of the CAAQS and NAAQS. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. Areas for which there is insufficient data available are designated unclassified.

California Environmental Quality Act Guidelines

The BAAQMD CEQA Air Quality Guidelines were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and GHG emissions. In April 2022, the BAAQMD's Board of Directors adopted the *CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*. These thresholds are designed to establish the level at which the BAAQMD believed air pollution emissions would

cause significant environmental impacts under CEQA. This latest version of the BAAQMD CEQA Guidelines was used to prepare the air quality analysis for the proposed project.

Plan Bay Area 2050

The Metropolitan Transportation Commission and ABAG jointly adopted the Plan Bay Area 2050 in October 2021. Plan Bay Area 2050 is forecasted to make significant progress in tackling the greatest challenges facing the region, from housing affordability to the intensifying impacts of global climate change. Plan Bay Area 2050 explores how the plan's strategies advance the region toward the adopted vision of a Bay Area that is affordable, connected, diverse, healthy, and vibrant for all residents, with a strong focus on measuring equity outcomes. Plan Bay Area 2050 is comprised of 35 strategies, categorized under the elements of housing, the economy, transportation, and the environment. Several of these strategies align with the Clean Air Plan strategies, including road pricing, advancing electric vehicle adoption, and retrofitting buildings to be more energy-efficient and carbon-neutral. Specifically, some of these strategies aim to reduce per capita CO_2 emissions from vehicles and buildings. GHG emissions from transportation would decrease significantly as a result of the transportation and land use changes of the Plan Bay Area 2050, and if all strategies are implemented, the Bay Area would meet the State mandate of a 19 percent reduction in per capita GHG emissions by 2035.

Local

City of Martinez General Plan

On November 2, 2022, the City Council adopted the General Plan 2035 (General Plan). The Noise and Air Quality Element includes goals, policies, and measures that are aimed at improving the air quality and public health in the City. The following goals and policies related to air quality are applicable to the proposed project:

- Goal NA-G-5: Improve air quality over current conditions and meet or exceed state and regional standards.
    - Policy NA-P-5.1: Continue to support and coordinate air quality planning efforts with other local, regional and state agencies to improve regional air quality.
- Goal NA-G-6: Reduce levels of air contaminants.
    - Policy NA-P-6.1: Reduce local contributions to the air contaminant levels in the air basin and particulate emissions to achieve levels below BAAQMD levels, in particular the levels of ozone and particulate matter.

3.1.2 Environmental Setting

San Francisco Bay Area Air Basin

The project site is located in the SFBAAB. The BAAQMD is the regional air quality agency for the SFBAAB, which comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma County, and the southwestern portion of Solano County. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors are briefly described below.

Topography

The topography of the SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays. This complex terrain, especially the higher elevations, distorts the normal wind flow patterns in the air basin.

Meteorology and Climate

During the summer, the large-scale meteorological condition that dominates the West Coast is a semi-permanent high-pressure cell over the Pacific Ocean. This high-pressure cell keeps storms from affecting the California coast. Hence, the SFBAAB experiences little precipitation in the summer months. Winds tend to blow onshore out of the north-northwest. Generally, in the winter, the Pacific high-pressure cell weakens and shifts southward, winds tend to flow offshore, upwelling ceases, and storms occur. During the winter rainy periods, inversions (layers of warmer air over colder air; see below) are weak or nonexistent, winds are usually moderate, and air pollution potential is low. The Pacific high-pressure cell periodically becomes dominant, bringing strong inversions, light winds, and high pollution potential.

During the summer, winds flowing from the northwest are drawn inland through the Golden Gate and over the lower portions of the San Francisco peninsula. This channeling of wind through the Golden Gate produces a jet that sweeps eastward and splits off to the northwest toward Richmond and to the southwest toward San Jose when it meets the East Bay hills. In the winter, the SFBAAB frequently experiences stormy conditions with moderate to strong winds, as well as periods of stagnation with very light winds. Winter stagnation episodes are characterized by nighttime drainage flows in coastal valleys.

During rainy periods, ventilation (rapid horizontal movement of air and injection of cleaner air) and vertical mixing are usually high, and thus pollution levels tend to be low. However, frequent dry periods do occur during the winter where mixing and ventilation are low and pollutant levels build up.

Summertime temperatures in the SFBAAB are determined in large part by the effect of differential heating between land and water surfaces. Because land tends to heat up and cool off more quickly than water, a large-scale gradient (differential) in temperature is often created between the coast and the Central Valley, and small-scale local gradients are often produced along the shorelines of the ocean and bays. The temperature gradient near the ocean is also exaggerated, especially in summer, because of the upwelling of cold ocean bottom water along the coast. On summer afternoons, the temperatures at the coast can be 35°F cooler than temperatures 15 to 20 miles inland. At night, this contrast usually decreases to less than 10°F.

In the winter, the relationship of minimum and maximum temperatures is reversed. During the daytime, the temperature contrast between the coast and inland areas is small, whereas at night the variation in temperature is large.

Criteria Air Pollutants

Criteria pollutants are air pollutants for which national and State criteria and standards have been promulgated and which are most relevant to current air quality planning and regulation in the SFBAAB. Criteria pollutants include CO, NO_2, O_3, PM_{10}, $PM_{2.5}$, SO_2, and Pb.

Carbon Monoxide (CO)

Carbon monoxide is a colorless, odorless gas primarily emitted from combustion processes and motor vehicles due to the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO is a localized pollutant that is found in high concentrations only near its source; therefore, elevated concentrations are usually only found near areas of high traffic volumes. Other sources of CO include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces during the winter. CO causes several health problems, including the aggravation of some heart diseases, reduced tolerance for exercise, impaired mental function, and impaired fetal development. At high levels of exposure, CO reduces the amount of oxygen in the blood, which may be fatal.

Nitrogen Dioxide (NO_2)

Nitrogen dioxide is a nitrogen oxide compound produced by the combustion of fossil fuels, such as in both gasoline and diesel-powered internal combustion engines, and from point sources, such as power plants. NO_2 (often used interchangeably with NO_X) absorbs blue light, gives a reddish-brown cast to the atmosphere, and reduces visibility. The principal form of NO_X produced by combustion is nitric oxide, which reacts rapidly to form NO_2, creating the mixture of nitric oxide and NO_2. NO_2 is an acute irritant that can aggravate respiratory illnesses and symptoms. NO_2 may have negative impacts on those with existing illnesses, such as chronic pulmonary fibrosis and an increase in bronchitis in young children.

Ozone (O_3)

Ozone is a gas that is formed when VOCs and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air which can contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. As a highly reactive molecule, O_3 readily combines with many different components of the atmosphere. Consequently, high O_3 levels tend to occur only while high VOC and NO_X levels are present to sustain the formation process, and O_3 levels rapidly decline once the precursors have been depleted. O_3 is considered a regional pollutant because its reactions occur on a regional rather than local scale. In addition, because O_3 requires sunlight to form, significant concentrations occur between the months of April and October. O_3 is a pungent, colorless, toxic gas with direct health effects on humans, including changes in breathing patterns, reduction of breathing capacity, increased susceptibility to infections, inflammation of lung tissue, and some immunological changes. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Particulate Matter (PM_{10} and $PM_{2.5}$)

Particulate matter pollution consists of very small liquid and solid particles floating in the air (e.g., soot, dust, aerosols, fumes, and mists) that can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM_{10} and $PM_{2.5}$ consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Man-made sources of PM_{10} are agricultural operations, industrial processes, combustion of fossil fuels, construction, demolition operations, and entrainment of road dust into the atmosphere. Natural sources of PM_{10} include windblown dust, wildfire smoke, and sea spray salt. Elevated levels of PM_{10} can cause respiratory irritation, reduced lung function, aggravation of cardiovascular disease, and cancer in individuals. $PM_{2.5}$ is generally associated with combustion processes, as well as formation in the atmosphere as a secondary pollutant

through chemical reactions. $PM_{2.5}$ is more likely to penetrate deeply into the lungs and poses a health threat to all groups but particularly to the elderly, children, and those with respiratory problems. Elevated levels of $PM_{2.5}$ can cause respiratory stress, decreased lung function, and increased risk of long-term disease, such as chronic bronchitis, asthma, and lung cancer.

Fugitive Dust

Fugitive dust, termed "fugitive" due to its open-air nature, is generated from the mechanical disturbance of granular material exposed to the air. The amount of PM_{10} generated as a part of fugitive dust emissions is of particular health concern. PM_{10} poses a serious health hazard alone or in combination with other pollutants. $PM_{2.5}$ is mostly produced by mechanical processes such as automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. $PM_{2.5}$ is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_X and SO_X combining with ammonia. $PM_{2.5}$ components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

Sulfur Dioxide (SO_2)

Sulfur oxides (SO_X) are compounds of sulfur and oxygen molecules. SO_2 is classified in a group of highly reactive gases known as "oxides of sulfur." The largest sources of SO_2 emissions are from fossil fuel combustion at power plants and other industrial facilities. Other sources of SO_2 emissions include industrial processes, such as extracting metal from ore, and the burning of fuels with a high sulfur content by locomotives, large ships, and off-road equipment. SO_2 is linked to several adverse effects on the respiratory system, including aggravation of respiratory diseases, such as asthma and emphysema, and reduced lung function.

Lead (Pb)

Lead is a metal found naturally in the environment, as well as in manufactured products. Historically, the major sources of Pb emissions have been mobile and industrial sources. Since the 1970s, the US Environmental Protection Agency has set national regulations to gradually reduce the Pb content in gasoline. As a result of phasing out leaded gasoline, metal processing is the current primary source of Pb emissions. The highest level of Pb in the air is generally found near Pb smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. The health impacts of Pb include behavioral and hearing disabilities in children and nervous system impairment.

Non-Criteria Air Pollutants

Toxic Air Contaminants

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. Exposure to TACs may result in long-term health effects, such as cancer, birth defects, neurological damage, asthma, or genetic damage; or short-term acute effects, such as eye watering, respiratory irritation, runny nose, throat pain, and headaches. TACs

are considered either carcinogenic or non-carcinogenic based on the nature of the health effects associated with exposure. For carcinogenic TACs, potential health impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, federal, and international agencies and was identified as a TAC by the CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed.

According to the Department of Conservation Division of Mines and Geology, serpentinite and ultramafic rocks are not known to occur within the project area.[1]

Local Ambient Air Quality

The BAAQMD operates a network of air quality monitoring stations throughout the SFBAAB to measure and monitor ambient pollutant concentrations and air quality. The monitoring station closest to the project site is the Concord station, located at 2975 Treat Boulevard, approximately 7.3 miles to the southeast of the project site. This monitoring station measures O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$. SO_2 and Pb are not monitored at this station, and, since the area is designated unclassified/attainment for these pollutants, air quality data for these pollutants are not included in Table 3.1-2, which reports ambient air quality measurements and indicates the number of days that each standard has been exceeded at the Concord station.

[1] Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, August 2000. Accessed October 31, 2023.

Table 3.1-2: Ambient Air Quality at the Concord Monitoring Station by Year

Pollutant	Primary Standard		Year	Maximum Concentration[a]	Number of Days State/Federal Std. Exceeded
	California	Federal			
Ozone (O_3)[b] (1-hour)	0.09 ppm for 1 hour	NA[e]	2020 2021 2022	0.108 ppm 0.096 ppm 0.079 ppm	2/0 1/0 0/0
Ozone (O_3)[b] (8-hour)	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2020 2021 2022	0.083 ppm 0.078 ppm 0.062 ppm	3/3 1/1 0/0
Carbon Monoxide (CO)[b, c] (1-hour)	20 ppm for 1 hour	35 ppm for 1 hour	2020 2021 2022	2.951 ppm 0.939 ppm 1.065 ppm	0/0 0/0 0/0
Nitrogen Dioxide (NO_2)[b]	0.18 ppm for 1 hour	0.100 ppm for 1 hour	2020 2021 2022	0.033 ppm 0.029 ppm 0.028 ppm	0/0 0/0 0/0
Fine Particulate Matter ($PM_{2.5}$)[b, c]	No Separate Standard	35 µg/m^3 for 24 hours	2020 2021 2022	121.4 µg/m^3 43.7 µg/m^3 32.7 µg/m^3	NA/16 NA/2 NA/0
Coarse Particulate Matter (PM_{10})[b, c, d]	50 µg/m^3 for 24 hours	150 µg/m^3 for 24 hours[f]	2020 2021 2022	167.0 µg/m^3 26.0 µg/m^3 35.0 µg/m^3	1/1 0/0 0/0

Notes:
ppm = parts per million
µg/m^3 = micrograms per cubic meter
NA = Not Applicable
PM_{10} = particulate matter 10 microns in diameter or less
$PM_{2.5}$ = particulate matter 2.5 microns in diameter or less

a. Maximum concentration is measured over the same period as the California Standards.
b. Data collected from the Santa Clarita Monitoring Station located at 2975 Treat Boulevard, Concord CA 94518.
c. PM_{10} and $PM_{2.5}$ exceedances are derived from the number of samples exceeded, not days.
d. PM_{10} exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
e. The Federal standard for 1-hour ozone was revoked in June 2005.
f. The Federal standard for average PM_{10} was revoked in December 2006.

Sources:
California Air Resources Board, *ADAM Air Quality Data Statistics*, http://www.arb.ca.gov/adam/, accessed April 3, 2024.
California Air Resources Board, *AQMIS2: Air Quality Data*, https://www.arb.ca.gov/aqmis2/aqdselect.php, accessed April 3, 2024.

3.1.3 Methodology

The methodology for construction and operation emission estimates for the proposed project are discussed below.

Clean Air Plan Consistency

The BAAQMD CEQA Air Quality Guidelines recommends an evaluation of the following two criteria to determine whether a project would be consistent or in conflict with the AQMP:

1. The project supports the primary goals of the Clean Air Plan.
2. The project conforms to applicable control measures from the Clean Air Plan and does not disrupt or hinder the implementation of any Clean Air Plan control measures.

Construction

Project construction would primarily generate temporary criteria pollutants from construction equipment operation on-site, construction worker vehicle trips to and from the project site, and from construction material deliveries to and from the project site. Criteria pollutants for project construction were calculated using the California Emissions Estimator Model (CalEEMod) version 2022.1. Construction input data for CalEEMod include, but are not limited to, (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; and (3) areas to be excavated and graded. The proposed project would be constructed over a single phase in approximately 12 months, beginning in spring 2026 and concluding in spring 2027. Table 3.1-3 summarizes the proposed construction schedule and the construction equipment list provided by the Project Applicant.

Construction emissions were quantified from the construction schedule and the types and quantity of equipment that would be used on-site during each construction phase, as shown in Table 3.1-3. Exhaust emission factors for typical diesel-powered heavy equipment are based CalEEMod program defaults. CalEEMod also estimates off-site emissions from worker and vendor trips, which were based on CalEEMod defaults. The proposed project would balance earthwork on-site and would not require soil import or export. As such, there would be no hauling trips generated during construction. The default trip lengths were used for worker and vendor trips.

Operation

As previously discussed, the proposed project would not affect existing rail traffic, as the cars would be added to one of the two existing local freight trains currently operating in the area. The proposed project may generate vehicle trips associated with the two additional employees required for project operations. However, emissions from two employees' commute trips would be nominal. As such, operational emissions are discussed qualitatively.

Table 3.1-3: Construction Schedule and Equipment

Construction Activity	Start Month/Year	Duration	Equipment	Equipment Count
Pipeline Relocation	April 2026	2 months	Excavators	2
			Forklifts	1
			Graders	1
			Other Construction Equipment	1
			Pumps	1
			Rough Terrain Forklifts	1
			Signal Boards	2
			Skid Steer Loaders	1
			Surfacing Equipment	1
			Tractors/Loaders/Backhoes	1
			Trenchers	1
			Welders	4
Demolition	June 2026	1 month	Concrete/Industrial Saws	1
			Forklifts	1
			Other Construction Equipment	1
			Rough Terrain Forklifts	1
			Skid Steer Loaders	1
			Tractors/Loaders/Backhoes	2
Site Preparation	July 2026	1 month	Excavators	2
			Forklifts	1
			Graders	2
			Other Construction Equipment	1
			Rollers	1
			Rough Terrain Forklifts	1
Civil and Mechanical Construction	August 2026	5 months	Aerial Lifts	1
			Concrete/Industrial Saws	1
			Cranes	1
			Excavators	1
			Forklifts	1
			Graders	1
			Other Construction Equipment	1
			Paving Equipment	1
			Pumps	1
			Rollers	1
			Rough Terrain Forklifts	1
			Signal Boards	2
			Skid Steer Loaders	1
			Surfacing Equipment	1
			Tractors/Loaders/Backhoes	1
			Trenchers	1
			Welders	4
Electrical, Fire System, and Miscellaneous Activities	January 2027	3 months	Aerial Lifts	1
			Air Compressors	1
			Cranes	1
			Forklifts	1
			Other Construction Equipment	1
			Paving Equipment	1
			Tractors/Loaders/Backhoes	1

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to air quality are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan; or
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

The Appendix G significance criteria noted below were scoped out of the analysis for further consideration in the Initial Study (Appendix A), and are discussed in Chapter 4, Other CEQA Considerations, of this Draft EIR.

- Would the project expose sensitive receptors to substantial pollutant concentrations?
- Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Regional Air Quality Thresholds

The BAAQMD's numeric significance thresholds for impacts to regional air quality are presented in Table 3.1-4. There are separate thresholds for short-term construction and long-term operational emissions. A project with daily and annual emissions below these thresholds is considered to have a less than significant effect on regional air quality from both a direct and cumulative impact standpoint.

Table 3.1-4: Bay Area Air Quality Management District Air Quality Significance Thresholds

Phase	Pollutant			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Construction (pounds per day)	54	54	82 (exhaust)	54 (exhaust)
Operational (pounds per day)	54	54	82	54
Operational (tons per year)	10	10	15	10

Notes: ROG = reactive organic gases; NO_X = nitrous oxides; PM_{10} = particulate matter 10 microns in diameter or less; $PM_{2.5}$ = particulate matter 2.5 microns in diameter or less
Source: Bay Area Air Quality Management District, *Air Quality Thresholds of Significance (Project Level)*, April 2022.

3.1.4 Impact Analysis

AQ-1 Would the project conflict with or obstruct implementation of the applicable air quality plan?

The applicable air quality plan for the proposed project is the BAAQMD's 2017 Clean Air Plan. The criteria for determining consistency with the 2017 Clean Air Plan are defined by the following indicators:

- Consistency Criterion No. 1: The project supports the primary goals of the Clean Air Plan.
- Consistency Criterion No. 2: The project conforms to applicable control measures from the Clean Air Plan and does not disrupt or hinder the implementation of any Clean Air Plan control measures.

2017 Clean Air Plan Goals

The primary goals of the 2017 Clean Air Plan are to attain the State and federal ambient air quality standards (CAAQS and NAAQS), reduce population exposure, protect public health in the Bay Area, reduce GHG emissions, and protect the climate. Furthermore, the 2017 Clean Air Plan also lays the groundwork for reducing GHG emissions in the Bay Area to meet the State's 2030 GHG reduction target and 2050 GHG reduction goal. A discussion of the proposed project's consistency with the goals of the 2017 Clean Air Plan is provided below.

Goal 1: Attain Air Quality Standards

BAAQMD's 2017 Clean Air Plan strategy is based on regional population and employment projections in the Bay Area compiled by ABAG, which are based, in part, on cities' general plan land use designations. These demographic projections are incorporated into Plan Bay Area 2050. Demographic trends incorporated into Plan Bay Area 2050 determine the vehicle miles traveled (VMT) in the Bay Area, which BAAQMD uses to forecast future air quality trends. The SFBAAB is currently designated a CAAQS nonattainment area for O_3, $PM_{2.5}$, and PM_{10}.

The project site is designated IM for industrial and manufacturing uses in the City's General Plan and zoned H-I (Heavy Industrial) in the City's Zoning Code.[2] The H-I Zone allows for petroleum and petroleum products refining including gasoline, kerosene, naphtha, and oil; petroleum products storage; and railroad freight stations, repair shops, and yards.[3] The project site is also zoned ECD (Environmental Conservation District) Zone because of its location near the Carquinez Strait. With implementation of the proposed project, the Martinez Terminal would continue to operate as a storage and transportation hub for petroleum and renewable products and related feed and blend stocks. As such, the proposed project is consistent with the existing General Plan and Zoning Code designations.

The proposed project is not a residential development and, therefore, does not involve population growth. The project operations would require two additional employees over existing conditions. According to the Plan Bay Area 2050: Final Blueprint Growth Pattern, the number of jobs within North Contra Costa County is anticipated to grow from 121,000 in 2015 to 184,000 in 2050.[4] The project-related increase of two employees would be a negligible contribution to the area's planned jobs growth through 2050. As such, the anticipated growth from the proposed project is within the population and employment projections identified by ABAG for the City. Because population and employment projections of the proposed project are consistent with regional growth projections and the City's General Plan land use and zoning designations, the BAAQMD emissions forecasts have already considered the additional growth and associated emissions from the proposed p

2 City of Martinez Planning Department, CommunityView Maps, available at: http://maps.digitalmapcentral.com/production/vecommunityview/cities/Martinez/index.aspx, accessed January 18, 2023.

3 City of Martinez Municipal Code, Title 22 (Zoning Code), Section 22.18.040 HI Heavy Industrial District – Permitted Uses.

4 Association of Bay Area Governments, Plan Bay Area 2050 Final Blueprint Growth Pattern, updated January 21, 2021, available at: https://www.planbayarea.org/sites/default/files/FinalBlueprintRelease_December2020_GrowthPattern_Jan2021Update.pdf, accessed April 12, 2024.

roject. Thus, emissions associated with the proposed project are included in BAAQMD projections, and the proposed project would not hinder BAAQMD's ability to attain the State or federal ambient air quality standards (CAAQS and NAAQS). Therefore, the proposed project would be consistent with this goal.

Goal 2: Reduce Population Exposure and Protect Public Health

With implementation of the proposed project, the Martinez Terminal would continue to operate as a storage and transportation hub for petroleum and renewable products and related feed and blend stocks. Additionally, new ancillary equipment and connections installed as part of the proposed project would include new piping connections, meters, and valves. The proposed new steam generator would modify the existing heating system at the facility using the same types and amounts of fuel, including natural gas and electricity, which are currently supplied by PG&E. The existing natural gas and electricity infrastructure would be extended from their current termini in the Martinez Terminal property in the western portion of the project site to connect to the railcars stored on the reestablished operating tracks. These connections would not expand the capacity of the natural gas and electricity infrastructure at the Martinez Terminal property and emissions from fuel combustion would not significantly change from existing conditions. Furthermore, the proposed new steam generator would employ more efficient heating technology than the current heating system. As such, the proposed project would not result in substantial new stationary sources of emissions compared to existing conditions. Thus, implementation of the proposed project would not result in significant health risks associated with exposure of TACs to sensitive populations. Therefore, the proposed project would be consistent with this goal.

Goal 3: Reduce GHG Emissions and Protect the Climate

Consistency of the proposed project with State, regional, and local plans adopted for the purpose of reducing GHG emissions are discussed in Section 3.6, Greenhouse Gas Emissions, of this Draft EIR. The proposed project would be required to adhere to statewide measures that have been adopted to achieve the GHG reduction targets of AB 32 and SB 32. The proposed project is consistent with regional strategies identified in Plan Bay Area 2050 and the City's Climate Action Plan. Therefore, the proposed project is consistent with this goal.

2017 Clean Air Plan Control Measures

Control measures included in the 2017 Clean Air Plan that are required by BAAQMD to reduce emissions for a wide range of both stationary and mobile sources are described in Table 3.1-5. As shown in Table 3.1-5, the proposed project would not conflict with applicable measures identified in the 2017 Clean Air Plan. Further, the proposed project would not disrupt or hinder BAAQMD from implementing the 2017 Clean Air Plan control measures. Therefore, the proposed project would be consistent with the control measures of the 2017 Clean Air Plan.

Table 3.1-5: 2017 Clean Air Plan Control Measures

Type	Measure Number/Title	Project Consistency
Stationary Source (SS) Control Measures	• SS 18 – Basin-Wide Combustion Strategy • SS 21 – New Source Review for Toxics • SS 25 – Coatings, Solvents, Lubricants, Sealants and Adhesives • SS 26 – Surface Prep and Cleaning Solvent • SS 27 – Digital Printing • SS 28 – LPG, Propane, Butane • SS 29 – Asphaltic Concrete • SS 30 – Residential Fan Type Furnaces • SS 31 – General Particulate Matter Emission Limitation • SS 32 – Emergency Backup Generators • SS 33 – Commercial Cooking Equipment • SS 34 – Wood Smoke • SS 35 – PM from Bulk Material Storage, Handling and Transport, Including Coke and Coal	The SS control measures are strategies based on reducing GHG emissions and protecting public health by reducing emissions of criteria pollutants and TACs from oil refineries and other sources. Stationary and area sources are regulated directly by BAAQMD; therefore, as the implementing agency, new stationary and area sources would be required to comply with BAAQMD regulations. The proposed project would not affect existing rail traffic, as the cars would be added to one of the two existing local freight trains currently operating in the area. Therefore, the proposed project would not result in substantial new stationary source emissions compared to existing conditions. As such, the proposed project would be consistent with the SS control measures.
Transportation (TR) Control Measures	• R 1 – Clean Air Teleworking Initiative • TR 2 – Trip Reduction Programs • TR 5 – Transit Efficiency and Use • TR 8 – Ridesharing, Last-Mile Connection • TR 9 – Bicycle and Pedestrian Access and Facilities • TR 10 – Land Use Strategies • TR 12 – Smart Driving • TR 13 – Parking Policies • TR 14 – Cars and Light Trucks • TR 16 – Indirect Source Review • TR 19 – Medium and Heavy Duty Trucks • TR 22 – Construction, Freight and Farming Equipment • TR 23 – Lawn and Garden Equipment	The TR control measures are strategies to reduce vehicle trips, vehicle use, VMT, vehicle idling, and traffic congestion for the purpose of reducing motor vehicle emissions. Although most of the TR control measures are implemented at the regional level (by the Metropolitan Transportation Commission or the California Department of Transportation), the 2017 Clean Air Plan relies on local communities to assist with implementation of some measures. The proposed project would not generate new train trips, and would generate nominal new vehicle trips due to the two additional employees required for project operation. As the proposed project would generate nominal vehicle trips compared to existing conditions, the proposed project would be consistent with the TR control measures.

Table 3.1-5: 2017 Clean Air Plan Control Measures

Type	Measure Number/Title	Project Consistency
Energy and Climate (EN) Control Measures	• EN 1 – Decarbonize Electricity Production • EN 2 – Renewable Energy Decrease Electricity Demand	The EN control measures are intended to reduce energy use as a means to reducing adverse air quality emissions. Establishment of rail service to the project site would not affect existing rail traffic, and no new rail trips would occur. As such, the project would not substantially change the railway operations compared to existing conditions, Additionally, the proposed new steam generator would employ more efficient heating technology than the current heating system. Therefore, the proposed project would not result in an increase in energy use. Therefore, the proposed project would be consistent with the EN control measures.
Buildings (BL) Control Measures	• BL 1 – Green Buildings • BL 2 – Decarbonize Buildings • BL 3 – Market-Based Solutions • BL 4 – Urban Heat Island Mitigation	The BL control measures focus on working with local governments to facilitate adoption of best GHG emissions control practices and policies. The proposed project does not include construction of new buildings. Thus, the BL control measures would not be applicable with the proposed project.
Waste Management (WA) Control Measures	• WA 1 – Landfills • WA 2 – Composting and Anaerobic Digesters • WA 3 – Green Waste Diversion • WA 4 – Recycling and Waste Reduction	The WA control measures include strategies to increase waste diversion rates through efforts to reduce, reuse, and recycle. The proposed project would require two additional employees over existing operations. Additionally, no new office or other uses would be developed at the site that would generate solid waste. As such, the proposed project would not significantly increase the amount of solid waste already generated by the existing terminal. Thus, the proposed project would be consistent with the WA control measures.
Water Control (WR) Measures	• WR 2 – Support Water Conservation	The WR control measures would encourage water conservation, reducing emissions from the water sector. Construction of the proposed project would require nominal amounts of water for activities, such as dust suppression and washing equipment. These activities would not result in significant water demand and would cease after construction is complete. During operation, the proposed project would not result in substantially more water demand than existing conditions as the proposed project would only require two additional employees above the existing workforce. Therefore, implementation of the proposed project would not result in an increase of water use. Thus, the proposed project would be consistent with the WA control measures.

Table 3.1-5: 2017 Clean Air Plan Control Measures

Type	Measure Number/Title	Project Consistency
Super-GHG (SL) Control Measures	• SL 1 – Short-Lived Climate Pollutants • SL 2 – Guidance for Local Planners • SL 3 – GHG Monitoring and Emissions Measurements Network	Super-GHGs include methane, black carbon and fluorinated gases. The compounds are sometimes referred to as short-lived climate pollutants because their lifetime in the atmosphere is generally short. The SL control measures are addressed on a sector-by-sector basis in the 2017 Clean Air Plan. The proposed project would not result in new railway operations or services compared to existing conditions, and therefore, would not result in an increase of super-GHG emissions. Thus, the proposed project would be consistent with the SL control measures.

Source: Bay Area Air Quality Management District, Clean Air Plan 2017, April 19, 2017.

In conclusion, the proposed project meets the criteria for determining consistency with the 2017 Clean Air Plan, including supporting the primary goals and conforming to the applicable control measures of the plan. Therefore, the proposed project would not conflict with or obstruct implementation of the 2017 Clean Air Plan, and impacts would be less than significant.

AQ-2 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Construction

The proposed project involves construction activities associated with pipeline relocation, demolition, site preparation, civil and mechanical construction, and electrical, fire system, and miscellaneous activities. Table 3.1-6 presents the anticipated average daily short-term construction emissions. The CalEEMod modeling incorporates the BAAQMD Basic Best Management Practices, which requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site, and fugitive dust emissions be controlled by regular watering or other dust prevention measures.

Table 3.1-6: Short-Term Construction Emissions

Construction Emissions[a]	Pollutant (pounds/day)[b]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Year 1	3.30	27.9	1.63	1.09
Year 2	1.06	9.89	0.50	0.38
Maximum Daily Emissions	3.30	27.9	1.63	1.09
BAAQMD Thresholds[c]	*54*	*54*	*82*	*54*
Exceed Threshold?	***No***	***No***	***No***	***No***

Notes:
a. Emissions were calculated using CalEEMod, version 2022.1. The higher emission between summer and winter were presented as a conservative analysis.
b. Modeling assumptions include compliance with BAAQMD Basic Best Management Practices which requires the following measures: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.
c. BAAQMD thresholds for PM_{10} and $PM_{2.5}$ during construction are for exhaust emissions only. However, as a conservative analysis, total emissions of the project, including exhaust and fugitive dust emissions, are presented and compared to the BAAQMD thresholds.

Source: Refer to Appendix B for detailed modeling data.

As indicated in Table 3.1-6, the criteria pollutants emissions during construction of the proposed project would not exceed the BAAQMD significance thresholds. A discussion of each criteria pollutant is provided below.

Fugitive Dust Emissions

Project construction activities such as land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways would be a source of fugitive dust emissions (PM_{10} and $PM_{2.5}$) that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from grading and construction is expected to be short-term and would cease after construction is complete. It should be noted that most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

The BAAQMD recommends the implementation of all Basic Best Management Practices whether or not a project's construction-related emission exceeds applicable thresholds. The BAAQMD Basic Best Management Practices include the following measures:

- Watering all exposed surfaces two times per day;
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered;
- All visible mud or dirt track-out onto adjacent public roads shall be removed with wet power vacuum street sweepers once per day;
- Vehicle speeds on unpaved roads are limited to 15 miles per hour;
- All roadways, driveways, and sidewalks shall be paved and completed as soon as possible;
- Vehicle idling time shall be minimized to less than five minutes;

- Construction equipment shall be maintained and properly tuned; and
- A publicly visible sign shall be included to contact the City for dust complaints.

As discussed in Chapter 2, Project Description, the proposed project's construction activities would comply with these BAAQMD Basic Best Management Practices. Adherence to the BAAQMD Basic Best Management Practices would greatly reduce PM_{10} and $PM_{2.5}$ concentrations. As shown in Table 3.1-6, total PM_{10} and $PM_{2.5}$ emissions would not exceed the BAAQMD thresholds during construction upon implementation of the BAAQMD Basic Best Management Practices. Thus, with adherence to existing regulations, impacts from construction-related fugitive dust emissions would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions (e.g., NO_x and CO) from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As presented in Table 3.1-6, construction equipment and worker vehicle exhaust emissions (i.e., NO_x) would be below the established BAAQMD thresholds. Therefore, air quality impacts from equipment and vehicle exhaust emission would be less than significant.

Reactive Organic Gas Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. However, as a rail restoration project, the proposed project would not involve application of asphalt or architectural coatings. As such, as shown in Table 3.1-6, ROG emissions would only be generated from construction equipment and off-site worker and vendor trips, which would not exceed the BAAQMD threshold. Therefore, the impact related to ROG emissions would be less than significant.

Total Daily Construction Emissions

In conclusion, in accordance with the BAAQMD Guidelines, the criteria pollutants emissions generated during construction of the proposed project would not exceed the BAAQMD significance thresholds. Thus, construction of the proposed project would not result in a cumulatively considerable net increase of non-attainment criteria pollutants, and impacts would be less than significant.

Operation

As discussed, the proposed project would not affect existing rail traffic, as the cars would be added to one of the two existing local freight trains currently operating in the area. Therefore, the project would not add train trips compared to the existing conditions. The proposed project may generate vehicle trips associated with the two additional employees required for project operations. However, emissions from two employees' commute trips would be nominal. Additionally, the proposed new steam generator would modify the existing heating system at the facility using the same types and amounts of fuel, including natural gas and electricity, which are currently supplied by PG&E. The existing natural gas and electricity infrastructure would be extended from their current termini in the Martinez Terminal property in the western portion of the project site to connect to the railcars stored on the reestablished operating tracks. These connections would not expand the capacity of the natural gas and electricity infrastructure at the Martinez Terminal property and emissions from fuel combustion would not significantly change from existing conditions. Furthermore, the proposed new steam generator would employ more

efficient heating technology than the current heating system. As such, operation of the proposed project would not result in a cumulatively considerable net increase of non-attainment criteria pollutants, and impacts be less than significant.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals [e.g., age, gender]). In particular, O_3 precursors, VOCs and NO_x, affect air quality on a regional scale. Health effects related to O_3 are, therefore, the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would not produce meaningful results. In other words, the proposed project's increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

Further, as noted in the Brief of Amicus Curiae by the South Coast Air Quality Management District (SCAQMD)[5], the SCAQMD acknowledged it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Furthermore, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD), SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.[6]

The SCAQMD acknowledges that health effects quantification from O_3, as an example, is correlated with the increases in ambient level of O_3 in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient O_3 levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO_x and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O_3 levels at the highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-related health impacts caused by NO_x or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Thus, as the proposed project would not exceed BAAQMD's thresholds for construction and would generate nominal operational air emissions, the proposed project would have a less than significant impact for air quality health impacts.

[5] South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

[6] San Joaquin Valley Air Pollution Control District, *Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

3.1.5 Mitigation Measures

Impacts related to air quality would be less than significant. Therefore, no mitigation measures are required.

3.1.6 Level of Significance After Mitigation

Impacts related to air quality were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

3.1.7 Cumulative Impacts

Consistency with Applicable Air Quality Plan

Future related projects would be required to analyze project-level consistency with applicable air quality plans, including the 2017 Clean Air Plan. As analyzed above, construction emissions of criteria air pollutants of the proposed project would be lower than BAAQMD thresholds, and operational emissions would be nominal. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations. Further, the proposed project would be consistent with the BAAQMD and ABAG's goals and policies (refer to Chapter 4, Other CEQA Considerations, of this Draft EIR). In addition, the growth anticipated to be generated by the proposed project would be consistent with ABAG's growth forecast, and therefore, is consistent with the 2017 Clean Air Plan. As such, impacts associated with the proposed project would not be cumulatively considerable, and cumulative impacts related to consistency with the AQMP would be less than significant.

Regional and Localized Emissions

The BAAQMD neither recommends quantified analyses of cumulative construction emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative construction impacts. The BAAQMD significance thresholds for construction are intended to meet the objectives of the 2017 Clean Air Plan to ensure the NAAQS and CAAQS are not exceeded.

In addition, the BAAQMD has set forth both a methodological framework as well as significance thresholds for the assessment of a project's cumulative operational air quality impacts. The BAAQMD's approach for assessing cumulative impacts is based on the BAAQMD's 2017 Clean Air Plan forecasts of attainment of NAAQS in accordance with the requirements of the federal and State CAAs. This forecast also considers ABAG's forecasted future regional growth. As such, the analysis of cumulative impacts focuses on determining whether the project is consistent with the growth assumptions upon which the BAAQMD's 2017 Clean Air Plan is based. If the project is consistent with the growth assumptions, then the future development would not impede the attainment of NAAQS, and a significant cumulative air quality impact would not occur.

As presented in the analyses above, the proposed project's regional and localized emissions would not exceed any of the BAAQMD significance thresholds. As a result, the proposed project would not contribute a cumulatively considerable net increase of any non-attainment criteria pollutant or expose sensitive receptors to potentially significant health risk impacts. Therefore, cumulative operational impacts associated with the proposed project would be less than significant.

3.2 BIOLOGICAL RESOURCES

This section identifies existing biological resources at the project site and in the surrounding area and provides an analysis of potential impacts to biological resources that may result from implementation of the proposed project. This section includes discussions of existing baseline biological conditions and characteristics, an analysis of the potential direct and indirect impacts on sensitive resources, and identifies appropriate mitigation measures to reduce potential impacts to the extent feasible, if necessary. This section is based on the *Biological Resources Technical Report, Martinez Terminal Railroad Spur Project, Martinez, California* (Biological Resources Report), prepared by Michael Baker International, dated December 2, 2024, and the *Delineation of State and Federal Jurisdictional Waters for the proposed Martinez Terminal Railroad Spur Project – City of Martinez, Contra Costa County, California* (Jurisdictional Delineation Report, included as Appendix F to the Biological Resources Report), prepared by Michael Baker International, dated December 2, 2024. The Biological Resources Report and the Jurisdictional Delineation Report are included in Appendix C.

3.2.1 Regulatory Setting

Federal

Federal Endangered Species Act

As defined within the Federal Endangered Species Act (FESA), an endangered species is any animal or plant listed by regulation as being in danger of extinction throughout all or a significant portion of its geographical range. A threatened species is any animal or plant that is likely to become endangered within the foreseeable future throughout all or a significant portion of its geographical range. Without a special permit, federal law prohibits the "take" of any individuals or habitat of federally listed species. Under Section 9 of the FESA, take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." The term "harm" has been clarified to include "any act which actually kills or injures fish or wildlife and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." Enforcement of FESA is administered by the U.S. Fish and Wildlife Service (USFWS).

Under the definition used by the FESA, "Critical Habitat" refers to specific areas within the geographical range of a species that were occupied at the time it was listed, that contain the physical or biological features that are essential to the survival and eventual recovery of that species, and that may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated as Critical Habitat if they contain one or more of the physical or biological features that are essential to that species' conservation and if the occupied areas are inadequate to ensure the species' recovery. If a project may result in take or adverse modification to a species' designated Critical Habitat and the project has a federal nexus, the project proponent may be required to provide suitable mitigation. Projects with a federal nexus may include projects that occur on federal lands, require federal permits (e.g., federal Clean Water Act Section 404 permit), or receive any federal oversight or funding. If there is a federal nexus, then the federal agency that is responsible for providing funds or permits would be required to consult with the USFWS under the FESA.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the FESA. The designation of Critical Habitat does not affect private landowners, unless a project they are

proposing uses federal funds, or requires federal authorization or permits (i.e., a permit from the U.S. Army Corps of Engineers [USACE]).

Migratory Bird Treaty Act

Pursuant to the federal Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) of 1918, as amended in 1972, federal law prohibits the taking of migratory birds or their nests or eggs (16 USC 703; 50 Code of Federal Regulations [CFR] 10, 21). The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered a "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (i.e., raptors). Six families of raptors occurring in North America were included in the amendment: *Accipitridae* (kites, hawks, and eagles); *Cathartidae* (New World vultures); *Falconidae* (falcons and caracaras); *Pandionidae* (ospreys); *Strigidae* (typical owls); and *Tytonidae* (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds (16 USC Section 668(a)). "Take" under the Act includes actions which significantly disturb eagles (50 CFR Section 22.3). Amendments to the Act in 1972 increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorized the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations, and recent amendments authorize USFWS to issue permits for incidental and practically unavoidable take of eagles.

Magnuson-Stevens Fishery Conservation and Management Act

Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1996 and subsequent revisions, regional fishery management councils were established to develop fishery management plans that comply with the Magnuson-Stevens Act's conservation and management requirements to prevent overfishing, rebuild overfished species, and track stock status. In a 1996 update to the Magnuson-Stevens Act, these management councils were tasked with identifying and describing Essential Fish Habitat (EFH) and to protect, conserve, and enhance EFH for the benefit of fisheries. The management of EFH falls under jurisdiction of the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS). EFH is defined by NMFS as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity".[1] Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include historic areas if appropriate. EFH substrates include sediment, hard bottom, structures underlying the waters, and associated biological communities required to support a sustainable fishery. Projects that may

[1] Magnuson Act Provisions; Essential Fish Habitat. 1997. National Oceanic and Atmospheric Administration. Interim Final Rule [62 Fed. Reg. 66551, Section 600.10 Definitions].

affect EFH are required to consult with NMFS to determine potential impacts of a project and ways to avoid, reduce, or compensate for adverse impacts to EFH.

Clean Water Act

Clean Water Act Section 404 requires that a permit be obtained from the USACE prior to the discharge of dredged or fill materials into any "waters of the United States or wetlands." Waters of the US are broadly defined in the USACE regulations (33 CFR 328) to include navigable waterways, their tributaries, lakes, ponds, and wetlands. Wetlands are defined as areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that normally do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands that are not specifically exempt from Section 404 regulations (such as drainage channels excavated on dry land) are considered to be "jurisdictional wetlands." The Supreme Court has ruled that waters that are non-navigable, isolated, and intrastate are not subject to USACE jurisdiction. The USACE is required to consult with the USFWS, US Environmental Protection Agency, and State Regional Water Quality Control Board (RWQCB), among other agencies, in carrying out its discretionary authority under Section 404.

Clean Water Act Section 401 requires that before the USACE would issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the RWQCB.

State

California Endangered Species Act

In addition to federal laws, the State of California has its own California Endangered Species Act (CESA), enforced by the California Department of Fish and Wildlife (CDFW). The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill) are regulated by CDFW. Habitat degradation or modification is not included in the definition of take under CESA. Nonetheless, CDFW has interpreted take to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A candidate species is one that potentially qualifies for listing under CESA, pending a formal review and assessment of available data; these species are afforded all of the same legal protections as if they were already listed. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened, endangered, and candidate species are fully protected against take, as defined above.

CDFW has also produced a Species of Special Concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of Special Concern may receive special attention during environmental review, but they do not have formal statutory

protection. At the federal level, USFWS also uses the label “species of concern” as an informal term that refers to species which might be in need of concentrated conservation actions.

As the species of concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513)

CDFW administers the California Fish and Game Code (CFGC). There are particular sections of the CFGC that are applicable to natural resource management. For example, Section 3503 makes it unlawful to destroy any birds’ nest or any birds’ eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey), such as hawks, eagles, and owls, are protected under Section 3503.5 which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 lists fully protected bird species, where CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). In addition, Section 3513 makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Sections 1600 et seq. of the CFGC establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely affect fish and wildlife resources, or when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Section 1602 of the CFGC requires any person, State, or local governmental agency or public utility to notify CDFW before beginning any activity that will do one or more of the following:

1. substantially obstruct or divert the natural flow of a river, stream, or lake;
2. substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
3. deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

This applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State, including the maintenance of existing drain culverts, outfalls, and other structures.

Native Plant Protection Act

Sections 1900-1913 of the CFGC were developed to preserve, protect, and enhance rare and endangered plants in the State of California. The Native Plant Protection Act requires all State agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require CDFW notification at least ten days in advance of any change in land use which would adversely impact listed plants. Specifically, the provisions of the Native Plant Protection Act allow CDFW to salvage listed plant species that would otherwise be destroyed.

Porter-Cologne Act

The Porter-Cologne Act gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool for the regulatory environment with respect to the State's authority over isolated and otherwise insignificant waters. Generally, in the event that there is no nexus to Traditional Navigable Waters, any person proposing to discharge waste into waters of the State that could affect its water quality must file a Report of Waste Discharge. Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB also interprets this to include fill discharged into water bodies.

Local

City of Martinez Municipal Code

Title 8, Chapter 8.08, Section 8.08.044, *Tree Permit Required*, of the City of Martinez Municipal Code establishes policies, regulations, and standards to protect and to preserve existing trees and plantings. Chapter 8.08 is part of a comprehensive plan developed to regulate the planting, maintenance, and removal of protected trees within the City. As discussed in Chapter 2, Project Description, the project site is zoned H-I (Heavy Industrial) in the City's zoning code. Section 8.08.044 of the City of Martinez Municipal Code identifies protected trees for any developed property within any industrial zoning district as:

a. Any tree measuring 24 inches or more in diameter, measured four and one-half feet from grade.
b. Any multi-stemmed tree where the sum of the individual trunks measures 24 inches or more in diameter measured four and one-half feet from grade.
c. Any significant grouping of trees, including groves of four or more trees.

Removal of any trees meeting these criteria requires a Tree Removal Permit from the City.

Title 8, Chapter 8.24, Section 8.24.090, *Wild Animals and Birds*, of the City of Martinez Municipal Code states that "No person shall hunt, molest, harm, frighten, kill, trap, chase, tease, shoot or throw missiles or objects at any animal, reptile or bird; or remove or have in possession the young of any animal or the eggs or nest or young of any reptile or bird."

City of Martinez General Plan

The City of Martinez General Plan (General Plan) identifies goals and policies related to biological resources in the Open Space and Conservation Element. Goals and policies relevant to the proposed project include the following:

- Goal OSC-G-4: Protect and maintain the quality of biological resources.
    - Policy OSC-P-4.1: Preserve and protect special status plant and animal species in a manner consistent with the state and federal endangered species acts, including protection of their habitat.
    - Measure OSC-I-4.1a: Prior to development within identified sensitive habitat areas, the area shall be surveyed for special status plant and/or animal species. If any special status plant or animal species are found in areas proposed for development, the appropriate resource agencies shall be contacted, and species-specific

management strategies established to ensure the protection of the particular species.

- Policy OSC-P-4.3: Development in sensitive habitat areas should be avoided or mitigated to the maximum extent possible.

- Goal OS-G-8: Protect water resource systems to maintain the natural habitat within the watershed and enhance the biological value of the City.
  - Policy OSC-P-8.1: Water resources such as the Alhambra Creek Watershed, wetlands, flood plains, recharge zones, riparian areas, open space and native or natural habitat should be preserved.
- Goal OSC-G-14: Ensure the preservation of natural resources by determining appropriate land use and compatibility with natural resources, the built environment, and open space.
  - Policy OSC-P-14.2: Where feasible, all projects shall avoid impacts on wetlands. If not feasible, appropriate mitigation measures shall be implemented consistent with federal, state and local, laws, rules, regulations and policies.
  - Policy OSC-P-14.3: Recognize the US Army Corps of Engineers as the designated permitting agency that regulates wetlands.

3.2.2 Environmental Setting

The proposed project would be situated within the Martinez Terminal property and within Union Pacific Railroad (UPRR) right-of-way (ROW), with the Waterfront Road overpass bisecting the project site. The project site is approximately 2.7 acres in size and consists primarily of developed land. The biological resources study area covers approximately 26.5 acres, including the project site and a buffer area around the project site, which was included to identify any potential sensitive biological resources that may be indirectly affected by the proposed project. As described in Chapter 2, Project Description, the project site is located in an industrial area in the northeastern portion of the City that is surrounded by extant, remnant, and former marshlands connected to the Peyton Slough to the north, Pacheco Slough delta to the east, and Peyton Marsh/McNabney Marsh to the west. This area also contains several wildlife areas including the Waterbird Regional Preserve approximately 380 feet to the south, Point Edith Wildlife Area approximately 1.5 miles northeast, and Grizzly Island Wildlife Area approximately 9.2 miles northeast.

A field survey/habitat assessment of the biological resources study area was conducted on March 28, 2024. The field survey was conducted to characterize existing site conditions and assess the potential for special-status biological resources to occur within the project site and/or surrounding area. Figure 3.2-1 shows the locations of vegetation communities, land cover types, and special-status species observations mapped from the field survey/habitat assessment.

Vegetation Communities and Land Cover Types

Four vegetation and land cover types are present in the biological resources study area: Other Open Waters (unvegetated open water embayment area), wetlands (brackish marsh), ruderal/ornamental/uplands, and developed/disturbed. Table 3.2-1, Vegetation Communities, provides a summary of the acreage of each vegetation community and land cover type within the biological resources study area. Refer to Figure 3.2-1 for the locations of these vegetation communities and land cover types.

Table 3.2-1: Vegetation Communities and Land Cover Types Within the Biological Resources Study Area

Vegetation Community/Land Cover Type	Acreage
Other Open Waters (unvegetated open water embayment area)	2.35
Wetlands (brackish marsh)	4.2
Ruderal/Ornamental/Uplands	10.72
Developed/Disturbed	9.26
Total	**26.53**

Source: Appendix C.

Other Open Waters

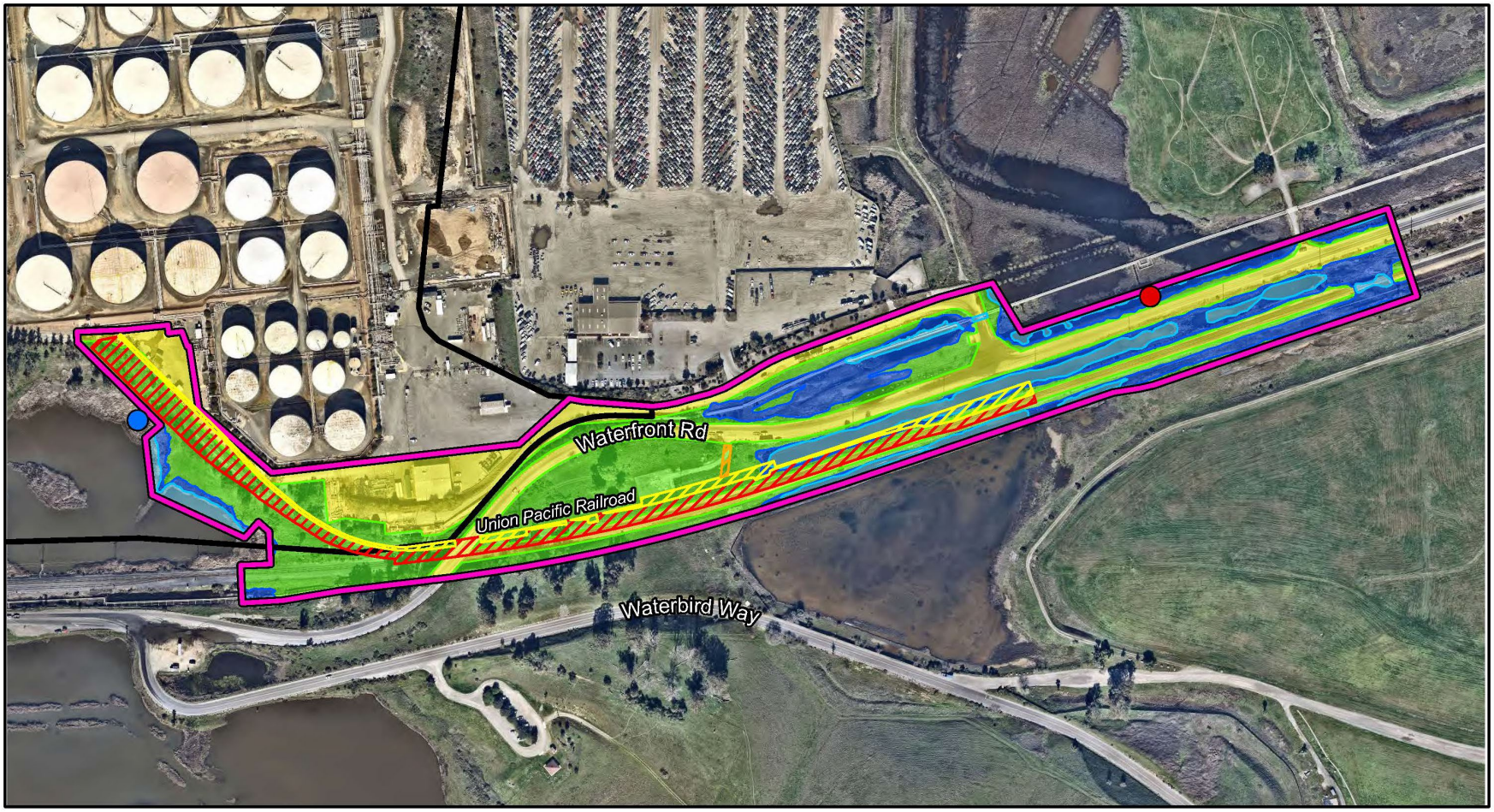
Open, ponded waters within the eastern portion of the biological resources study area, and adjacent to the project site south of Waterfront Road and north and south of the UPRR ROW are non-vegetated and appear to be permanently inundated.

Wetlands – Brackish Marsh

Brackish marsh habitat on-site consists of a small area along the western edge of the project site and along the borders of the open waters in the eastern portion of the project site, along Waterfront Road. This community consists of vegetation that varies with amount and frequency of inundation. Areas that experience frequent inundation are dominated by cordgrass (*Spartina* sp.), bulrush (*Bolboschoenus* spp. and *Schoenoplectus* spp.), and common reed (*Phragmites australis*). Gumplant (*Grindelia* sp.), jaumea (*Jaumea* sp.), povertyweed (*Iva axillaris*), saltgrass, pickleweed, alkali heath, and perennial pepperweed occur in very dense patches beside this brackish marsh vegetation on areas that are slightly elevated topographically or are not inundated as frequently. Non-native species present within this community include *Erodium sp.*, *Bromus sp.,* and fennel (*Foeniculum vulgare*).

Ruderal/Ornamental/Uplands

This vegetation community occurs primarily within the western portion of the biological resources study area with a small portion at the southeastern end of the area. The term “ruderal vegetation” is used to describe vegetation growing on disturbed land where native plant communities have been eliminated or substantially degraded. Plant species diversity in this cover type is low and dominated by various non-native species typical of disturbed lands in the Bay Area and Delta regions. The vegetated uplands in the biological resources study area are dominated by ruderal vegetation including wild oat (*Avena fatua*), rip-gut brome (*Bromus diandrus*), prickly lettuce (*Lactuca serriola*), vetch (*Vicia* sp.), and wild radish (*Raphanus sativus*), as well as stands of non-native forbs and non-native grasslands with Tasmanian blue gum (*Eucalyptus globulus*), acacia (*Acacia* spp.), Peruvian pepper tree (*Schinus molle*), cotoneaster (*Cotoneaster* sp.), and other ornamental plants. Native coyote brush and toyon (*Heteromeles arbutifolia*) shrubs, were also present in some areas.



Legend

- Study Area
- Martinez Terminal Property Boundary
- Developed/Disturbed (9.26 ac)
- Ruderal/Ornamental/Uplands (10.72 ac)
- Brackish Marsh Wetlands (4.2 ac)
- Other Open Water (2.35 ac)
- Permanent Impacts (2.72 ac)
- Temporary Impacts (0.81 ac)
- Temporary Impacts Access (0.03 ac)
- Saltmarsh Common Yellowthroat (*Geothlypis trichas sinuosa*)
- Suisun Song Sparrow (*Melospiza melodia maxillaris*)

MARTINEZ TERMINAL RAIL RESTORATION PROJECT

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0 200 400 US Feet

Source: Nearmap Imagery 2024, Esri Hybrid Reference Layer

Vegetation Communities, Other Land Uses, and Special-Status Species Observations

Figure 3.2-1

Developed/Disturbed

Approximately 9.26 acres of disturbed/developed land cover are located within the biological resources study area. Disturbed/developed areas include areas with petroleum pipelines, areas utilized to access and maintenance utilities crossing the project site, and areas that have been disturbed in the past and are devoid of vegetation.

Wildlife Species

This section provides a general discussion of common wildlife species that were detected on-site or that are expected to occur based on existing conditions.

Invertebrates

No direct surveys for common invertebrates were conducted; however, invertebrate species that were observed during the field survey were recorded. Invertebrate species observed included honeybee (*Apis mellifera*), American dog tick (*Dermacentor variabilis*), and Western black-legged tick (*Ixodes pacificus*).

Amphibians

The potential presence of amphibians varies greatly between habitats within the biological resources study area. Terrestrial species may or may not require standing water for reproduction. Terrestrial species avoid high heat conditions by burrowing underground, within crevices in trees, rocks, and logs, and under stones and surface litter during the day and dry seasons. Due to their secretive nature, terrestrial amphibians are rarely observed but may be quite abundant if conditions are favorable. Aquatic amphibians are dependent on standing or flowing water for reproduction. Such habitats include freshwater marshes and open water (reservoirs, permanent and temporary pools and ponds, and perennial streams). Many aquatic amphibians will use temporary pools as nesting sites. These pools are temporary in duration and form following winter and spring rains common to the San Francisco Bay Area. The biological resources study area has the potential to support amphibians that do not require a permanent water source; however, no amphibian species were observed during the field survey.

Reptiles

Reptilian diversity and abundance typically vary with habitat type and character. Some species prefer only one or two natural communities; however, most will forage in a variety of communities. Several reptile species prefer open habitats that allow free movement and high visibility. Most species occurring in open habitats rely on the presence of small mammal burrows for cover and escape from predators and extreme weather. The project site has many essential reptilian habitat characteristics and possesses the potential to support several species. One reptile species was observed within the biological resources study area: coast range fence lizard (*Sceloporus occidentalis bocourtii*). A number of additional species have a potential to occur, including San Francisco alligator lizard (*Elgaria coerulea coerulea*) and Skilton's skink *(Plestidon skiltonianus skiltonianus*).

Birds

Much of the habitat within the biological resources study area provides foraging opportunities for avian species, including killdeer (*Charadruis vociferans*), American avocet (*Recurvirostra americana*), and Canada goose (*Branta canadensis*), which were observed during the field survey, along with 27 other bird species. The Brackish Marsh Wetlands on site provide foraging opportunities for coastal/shoreline bird species such as American coot (*Fulcia americana*),

Canada goose (*Branta canadensis*), great egret (*Ardea alba*), and black-necked stilt (*Himantopus mexicanus*). Additionally, this habitat provides foraging opportunities for small mammals, which may attract predatory bird species. Collectively, the availability of prey and vegetation and anthropogenic structures for perching would suggest that the project site is being used by a variety of avian species.

Mammals

One mammal species was observed within the biological resources study area: domestic dog (*Canis domesticus*). A number of other species are expected to be resident within the region and may use the project site and surrounding area to forage or for cover, including coyote (*Canis latrans*) and California ground squirrel (*Otospermophilus beecheyi*).

Fish

Open water in the western portion of the biological resources study area provides habitat for fish species, including chinook salmon, leopard shark (*Triakis semifasciata*), spiny dogfish (*Squalus acanthias*), brown rockfish (*Sebastes auriculatus*), topsmelt (*Atherinops affinis*), northern anchovy (*Engraulis mordax*), and starry flounder (*Platichthys stellatus*). No fish species were observed during the field survey.

Special-Status and Sensitive Biological Resources

The California Natural Diversity Database (CNDDB), Inventory of Rare and Endangered Plants of California (CIRP), and USFWS Information for Planning and Consultation project planning tool (IPaC) were queried for reported locations of special-status plant and wildlife species as well as special-status natural vegetation communities in the USGS *Cordelia, Clayton, Briones Valley. Walnut Creek, Honker Bay, Vine Hill, Fairfield South, Benicia, and Denverton, California* 7.5-minute quadrangles. The field survey was conducted to assess and evaluate the existing condition of the habitat(s) within the boundaries of the biological resources study area to determine if the existing vegetation communities, at the time of the field survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species. Additionally, the reported locations of the CNDDB and CIRP species records in relation to the biological resources study area were considered. Refer to Appendix C for the complete list of species identified.

Special-Status Plants

Special-status plant species include those listed as Endangered, Threatened, Rare or those species proposed for listing by the USFWS under the FESA and CDFW under the CESA. The CNPS inventory is sanctioned by CDFW and essentially serves as the list of candidate plant species for state listing. CNPS's California Rare Plant Ranks (CRPR) 1B and 2 species are considered eligible for state listing as endangered or threatened.

No special-status plant species were observed during the field survey. Based on the results of the literature review and the field survey, existing site conditions, and a review of specific habitat requirements, occurrence records, and known distributions, the native vegetation communities in the Brackish Marsh Wetlands within the biological resources study area (refer to Figure 3.2-1) have a moderate or high potential to support the following special-status plant species:

- Delta tule pea (California Rare Plant Rank [CRPR] 1B.2): This species is common to California and is found mainly in the Sacramento and San Joaquin Delta. It is also documented from Contra Costa, Sacramento, San Joaquin, Solano, Napa, and Alameda Counties. Delta tule pea inhabits coastal and estuarine marshes and swamps and slough

edges. It is commonly found with California wildrose (*Rosa californica*), cattails (*Typha* ssp.), and common tule (*Scirpus acutus*). Though not detected during field surveys, habitat potentially suitable for this species occurs on site and this species is known from the immediate vicinity of McNabney Marsh, and numerous CNDDB records occur within 0.1-mile of the site. As a result, this species has a high potential to occur in the biological resources study area.

Special-Status Wildlife

Special-status wildlife species include those listed as Endangered, Threatened, Rare or those species proposed for listing by the USFWS under the FESA and CDFW under the CESA. Additional species receive federal protection under the Bald Eagle Protection Act (e.g., bald eagle, golden eagle), the MBTA, and state protection under CEQA Section 15380(d).

Two special-status wildlife species were observed during the field survey, saltmarsh common yellowthroat (Species of Special Concern [SSC]) and Suisun's song sparrow (SSC) (refer to Figure 3.2-1 for observation locations). Based on the results of the literature review and the field surveys, and a review of specific habitat requirements, occurrence records, and known distributions of the special-status wildlife species identified in the literature review, it was determined that the project site has a moderate or high potential to support two additional special-status wildlife species: northern harrier (*Circus hudsonius*; SSC) and osprey (*Pandion haliaetus*; WL). The four special-status wildlife species with moderate to high potential to occur within the biological resources study area are described as follows:

- Saltmarsh common yellowthroat (Species of Special Concern [SSC]): Endemic to the greater San Francisco Bay region, the Saltmarsh common yellowthroat is one of thirteen commonly accepted subspecies of the common yellowthroat and is a CDFW SSC. The current range of this subspecies includes four main areas; coastal riparian and wetland areas of western Marin County, the tidal marsh system of San Pablo Bay, the tidal marsh system of southern San Francisco Bay, and coastal riparian and wetland areas in San Mateo County. Additional disjunct populations occur at Lake Merced, in San Francisco County, and wet areas on San Bruno Mountain, in San Mateo County. This species occupies the ecotone between moist and upland habitats, and occasionally small and isolated patches of habitat. In brackish and saline tidal marsh habitat around San Francisco Bay, abundance is associated with a high percent cover of rushes (*Scirpus* spp.). Yellowthroats build open-cup nests that are well concealed, typically near the ground in grasses, herbaceous vegetation, cattails, tules, and some shrubs.

  This species is known to occur in the Martinez area, suitable habitat for the species occurs within the biological resources study area, and numerous CNDDB records occur within close proximity to the site. Saltmarsh common yellowthroat individuals were detected during the field survey.

- Suisun's song sparrow (SSC): Endemic to California, the Suisun's song sparrow is a CDFW SSC. This species is confined to tidal salt and brackish marshes fringing the Suisun Bay and Carquinez Strait east to Antioch, at the confluence of the San Joaquin and Sacramento rivers. Populations vary in size, with the largest in Benicia State Park and along the Martinez shoreline. This subspecies is known to occur in the tidal marshes within Suisun Bay, requiring dense vegetation for nesting sites, song perches, and cover for refuge from predators. Suisun song sparrows use a variety of habitat types, though they are primarily associated with tidal channels dominated by pickleweed with gumplant along

the channels. Song sparrows build cup nests in dense vegetation in a large variety of substrates.

Suitable habitat suitable for this species is present within the biological resources study area. Additionally, Suisun's song sparrow was observed within the study area during the field survey.

- Northern harrier (SSC): Northern harrier is a medium-sized raptor that is a CDFW SSC. This species occurs year-round within its breeding range in California and occurs in greater numbers and a broader range during migration and winter months. Northern harriers forage and breed in a variety of treeless, open habitats that provide adequate prey, cover, and low perches, such as fence posts and shrubs. Within California, habitats include freshwater marshes, saltwater, marshes, brackish marshes, wet meadows, and the borders of lakes, rivers, and streams, as well as grasslands and some croplands.

  This species was not observed during the field survey; however, more than 100 observations have been reported in the project vicinity since 2009. Therefore, this species is expected to be a regular visitor, and due to the number of utility poles and trees in the area, also has the potential to nest in the vicinity of the biological resources study area. This species was determined to have a high potential to occur on-site.

- Osprey (WL): Osprey is a large, fish-eating raptor that is a CDFW Watch List species. This species is typically found in and around coastal saltwater habitats, such as bays and estuaries, but they are also known to occur near inland lakes and rivers. They prefer to nest on tall, isolated trees, poles, and towers.

  This species was not observed during the field survey; however, more than 100 observations have been reported in the project vicinity since 2009. Therefore, this species is expected to be a regular visitor, and due to the number of utility poles and trees in the area, also has the potential to nest in the vicinity of the biological resources study area. This species was determined to have high potential to occur within the study area.

Sensitive Natural Communities

No riparian habitat was identified within the biological resources study area. Six special-status vegetation communities have been reported in the CNDDB within the USGS *Cordelia, Clayton, Briones Valley. Walnut Creek, Honker Bay, Vine Hill, Fairfield South, Benicia, and Denverton, California* 7.5-minute quadrangles: Coastal Brackish Marsh, Northern Claypan Vernal Pool, Northern Coastal Salt Marsh, Northern Maritime Chaparral, Serpentine Bunchgrass, and Valley Needlegrass Grassland. Two of these special-status vegetation communities, Coastal Brackish Marsh and Northern Coastal Salt Marsh, correspond with the Brackish Marsh Wetlands identified within the biological resources study area during the field surveys.

Critical Habitat

No Critical Habitat designated by USFWS for any species listed under the FESA coincides with the biological resources study area. Critical Habitat for Delta smelt (*Hypomesus transpacificus*, FT, SE) coinciding with Suisun Bay, is located approximately 0.65-mile northwest of the study area. In addition, Critical Habitat for Alameda whipsnake (striped racer) (*Masticophis lateralis euryxanthus*, FT, ST) is located approximately 4 miles southwest of the study area.

Critical Habitat designated by NMFS for species listed under the FESA is also absent from the biological resources study area, although Critical Habitat for green sturgeon (*Acipenser*

medirostris, southern Distinct Population Segment [DPS] and FT) lies approximately 0.3-mile north of the biological resources study area.

Essential Fish Habitat

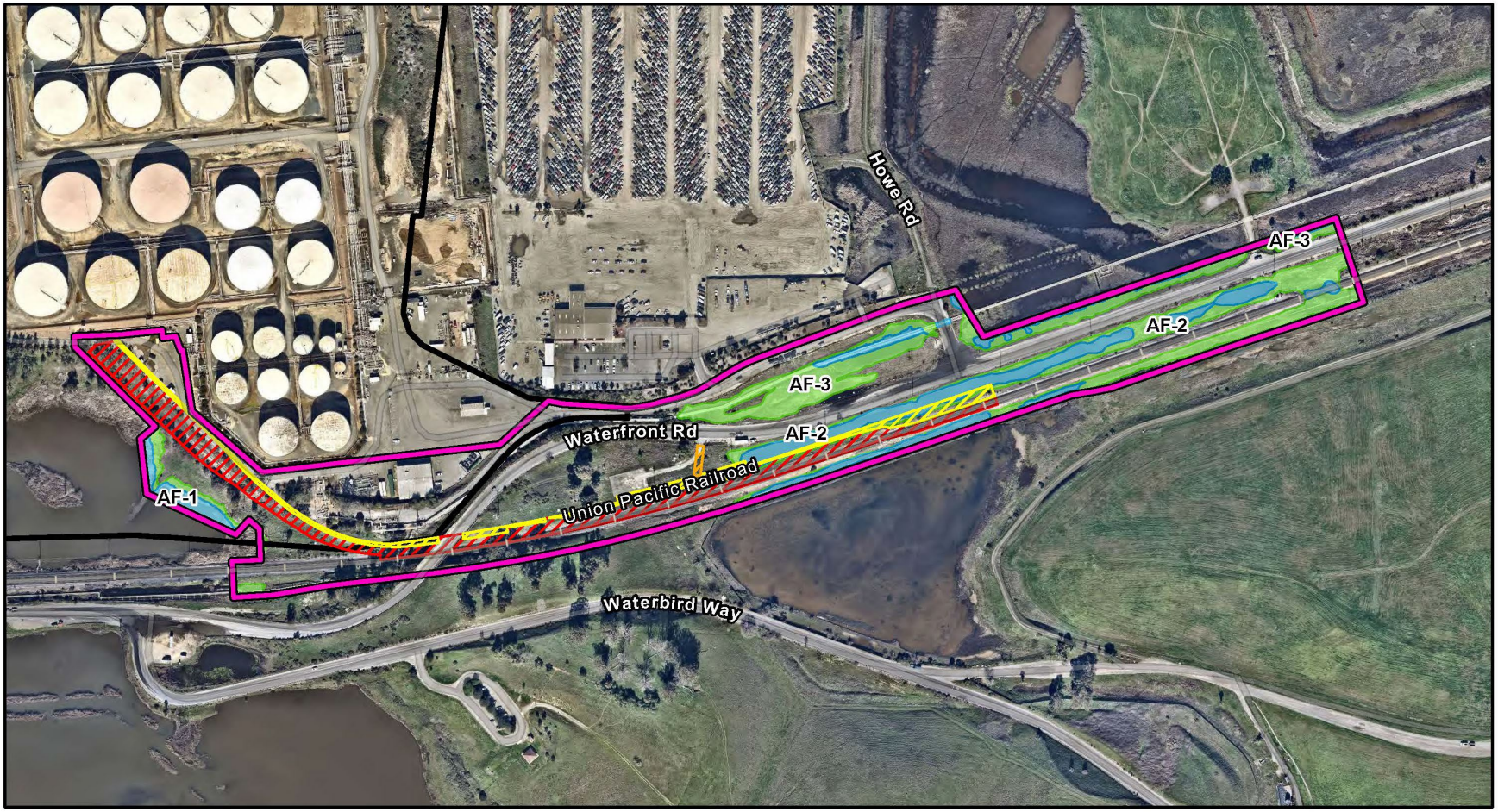
EFH for chinook salmon (*Oncorhynchus tshawfscha*) coincides with the biological resources study area and extends across upland areas in the project vicinity. Additionally, EFH for groundfish and coastal pelagic species coincide with Suisun Bay, just north-northwest of the study area.

State and Federal Jurisdictional Resources

There are three key agencies that regulate activities within inland lakes, streams, wetlands, and riparian areas in California. The USACE regulates activities that result in the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the federal Clean Water Act and Section 10 of the Rivers and Harbors Act. Of the State agencies, the RWQCB regulates discharges to waters of the State, including wetlands, pursuant to Section 401 of the Clean Water Act, Section 13263 of the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State; and, CDFW regulates alterations to lakes, streambeds, and associated riparian habitats pursuant to Section 1600 *et seq*. of the CFGC.

The following three potentially State or federal jurisdictional features were observed within the biological resources study area. Of these three features, only Aquatic Feature 2 coincides with the project footprint. Refer to Figure 3.2-2 for the locations of the potentially jurisdictional features in the study area.

- Aquatic Feature 1: Aquatic Feature 1 is an earthen perennial, tidally influenced marsh that that is located along the western boundary of the project site. Aquatic Feature 1 is a tidally influenced marsh that connects to Suisun Bay roughly 0.9 mile north of the project site. This feature had surface water present at the time of the field survey.
- Aquatic Feature 2: Aquatic Feature 2 is an earthen perennial channel beginning in the center of the project site south of Waterfront Road and the adjacent railroad tracks, continuing east through to the eastern end of the project site. Although a culvert connects Aquatic Feature 2 to the tidally influenced marsh to the north of Waterfront Road, this culvert is at an elevation that would only connect flows to the northern marsh under unusually high tidal conditions and is therefore not considered tidally influenced under normal conditions. Aquatic Feature 2 is a salt marsh that connects to Pacheco Creek roughly 0.5 mile east of the project site. At the time of the field survey, Aquatic Feature 2 had surface water present.
- Aquatic Feature 3: Aquatic Feature 3 is an earthen perennial, tidally influenced channel beginning in the center of the project site north of Waterfront Road and the adjacent railroad tracks, continuing east through to the eastern end of the project site. Aquatic Feature 3 is a tidally influenced salt marsh that connects to Pacheco Creek roughly 0.5 mile east of the project site and also appears to be connected to the tidal flats to the north leading to Suisun Bay. At the time of the field survey, Aquatic Feature 3 had surface water present.



Legend

AF-1 = Aquatic Feature 1
AF-2 = Aquatic Feature 2
AF-3 = Aquatic Feature 3

Study Area (26.5 ac)
Martinez Terminal Property Boundary
Wetland Waters of the United States (4.20 ac)
Non-Wetland Waters of the United States (2.35 ac)

Permanent Impacts (2.72 ac)
Temporary Impacts (0.81 ac)
Temporary Impacts Access (0.03 ac)

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0 200 400 US Feet

Source: Nearmap Imagery 2024, Esri Hybrid Reference Layer

Potential State and Federal Jurisdictional Resources

Figure 3.2-2

Wildlife Movement Corridors

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic material. Corridors effectively act as links between different populations of a species.

Corridors mitigate the effects of habitat fragmentation by: (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). Although the nature of these movements are species specific, large open spaces will generally support a diverse wildlife community representing all types of movement. Each type of movement may also be represented at a variety of scales from non-migratory movement of amphibians, reptiles, and some birds on a “local” level to many square mile home ranges of large mammals moving at a “regional” level. The location of the project site supports all types of wildlife movement on some scale.

The biological resources study area is largely developed and borders large open space areas including the Waterbird Regional Preserve, Point Edith Wildlife Area, and Suisun Bay. Data gathered from biological surveys indicate that the project site and/or surrounding area contain habitat that supports a variety of species of invertebrates, amphibians, reptiles, birds, and mammals. The home range and average dispersal distance of many of these species are likely larger than the project site and extend into and through the adjacent open spaces. Mammals known to occur within the biological resources study area either by direct observation or by the presence of sign include the California ground squirrel and coyote.

3.2.3 Methodology

Biological resources may be either directly or indirectly impacted. Direct and indirect impacts may be either permanent or temporary in nature. These impact categories are defined below.

- **Direct**: Any alteration, physical disturbance, or destruction of biological resources that would result from the project modifications is considered a direct impact. Examples include clearing vegetation, loss of individual species and/or their habitats, and encroaching into wetlands or a river.
- **Indirect**: As a result of the project modifications, biological resources may also be affected in a manner that is ancillary to physical impacts. Examples include elevated noise and dust levels, soil compaction, increased human activity, and the introduction of invasive wildlife (domestic cats and dogs) and plants.

- **Permanent**: All impacts that result in the long-term or irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources.
- **Temporary**: Any impacts considered to be reversible can be viewed as temporary. Examples include the generation of fugitive dust during construction, or removing vegetation to provide work areas, and either allowing the natural vegetation to recolonize or actively revegetating the affected area.

Prior to conducting the field survey, literature reviews and records searches were conducted for special-status biological resources potentially occurring on or within the vicinity of the project site, specifically within a 5-mile radius. Resources reviewed included the CNDDB, CIRP, and IPaC.

Following the background literature review, a field survey/habitat assessment was conducted on March 28, 2024, to document existing biological conditions and determine the potential for special-status plant and wildlife species and sensitive habitats to occur within the project site. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, the overall condition of on-site vegetation, and the presence of potentially regulated jurisdictional features (e.g., streams, flood control channels) were noted within the project site.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to biological resources are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service;
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The Appendix G significance criterion noted below was scoped out of the analysis for further consideration in the Initial Study (Appendix A), and is discussed in Chapter 4, Other CEQA Considerations, of this Draft EIR.

- Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

3.2.4 Impact Analysis

BIO-1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Construction

Special-Status Plant Species

As discussed in Section 3.2.2 above, there is a high potential for one special-status plant species to occur within the biological resources study area: Delta tule pea (CRPR 1B.2). If present on-site during project construction, impacts to this species could occur through the direct loss of individuals during construction activities, potentially through direct trampling or crushing. As such, Mitigation Measure BIO-A would be implemented in order to determine if the project would directly impact any special-status plant species. Mitigation Measure BIO-A would require that a rare plant survey be conducted prior to the start of construction activities to document the presence or absence of any special-status plants within the project site, and avoidance and/or minimization measures shall be explored to protect the special-status plant population(s). If avoidance is not possible, consultation with CDFW shall be required prior to project initiation to identify suitable compensatory mitigation. Additionally, Mitigation Measure BIO-B would be implemented, which would require identification of a biological monitor who would be present during all construction activities involving vegetation removal and/or ground-disturbance; implementation of a Worker Environmental Awareness Program for all construction crews and contractors prior to starting work on the project site; and establishment of construction site protocols, such as inspecting construction equipment for leaks and keeping the project site clean of debris and trash. With implementation of Mitigation Measures BIO-A and BIO-B, potential direct and indirect impacts to special-status plant species would be less than significant.

Special-Status Wildlife Species

As described in Section 3.2.2 above, two special-status wildlife species were observed during the field survey: saltmarsh common yellowthroat (SSC) and Suisun's song sparrow (SSC). There is also a moderate and high potential for two additional special-status wildlife species to occur within the project site: northern harrier (SSC) and osprey (WL). These special-status bird species have the potential to nest in and near the project site, including in trees and vegetation within the project footprint and adjacent to the proposed location of the operating tracks. As discussed in Chapter 2, Project Description, several trees and vegetation within and near the project site would need to be trimmed or removed during construction. As such, direct impacts could include the loss of nests, eggs, and fledglings if vegetation clearing and ground-disturbing activities occur during the nesting season (generally between February 15 and August 31); further, nesting birds are protected under the MBTA. Additionally, construction-related noise could cause birds to abandon their nests, resulting in indirect impacts to special-status birds. In order to minimize impacts to nesting birds, Mitigation Measures BIO-B and BIO-C would be implemented. Mitigation Measure BIO-C requires that, if feasible, project construction occur outside of the avian breeding season; if this is infeasible, then a qualified biologist would conduct bird surveys on site and establish buffers and continued monitoring if a protected bird is found.

EFH for Chinook salmon coincides with Suisun Bay and vast areas of upland areas surrounding the bay, including the project site. EFH for groundfish and coastal pelagic species also coincides with Suisun Bay but does not extend into the project site. Permanent and temporary impacts

would be minimal and would avoid aquatic features that are tidally influenced and provide suitable habitat. Therefore, construction impacts to EFH for Chinook salmon would be less than significant.

With implementation of Mitigation Measures BIO-B and BIO-C, potential direct and indirect construction impacts to special-status wildlife species would be less than significant.

Operation

As discussed, a portion of the project site is located within the existing UPRR ROW, which is an active railroad corridor providing service to 15 trains daily. The proposed project would not affect existing rail traffic, as the proposed cars would be added to one of the two existing local freight trains currently operating in the area. As such, the portion of the project site within the UPRR ROW would continue to operate similar to the existing conditions. Additionally, project operation and routine maintenance activities would occur within previously disturbed areas within the Martinez Terminal property. Therefore, no direct or indirect impacts to special-status plant and wildlife species would occur during project operation, and impacts would be less than significant.

BIO-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

Construction

As previously discussed, no riparian habitat was identified within the biological resources study area. Impacts to sensitive natural communities within the project site could occur within active construction zones and use of staging areas. Based on the construction zone footprint, it is anticipated that project construction activities would result in 0.06-acre of permanent and 0.11-acre of temporary impacts to Brackish Marsh Wetlands, which occur within a jurisdictional aquatic feature that coincides with the project site. Two special-status vegetation communities associated with the Brackish Marsh wetland land cover type, Coastal Brackish Marsh and Northern Coastal Salt Marsh, occur within the project site. As further described under Threshold BIO-3 below, impacts to protected wetlands would require the proposed project to obtain permits pursuant to Sections 401 and 404 of the Clean Water Act and Section 13263 of the Porter-Cologne Act prior to commencement of construction activities occurring within jurisdictional aquatic features. Furthermore, Mitigation Measure BIO-D outlines additional measures to minimize impacts to protected wetlands during construction. With adherence to existing permitting requirements and implementation of Mitigation Measure BIO-D, impacts to sensitive natural communities associated with protected wetlands at the project site would be less than significant during construction.

Operation

Following completion of construction activities, operation of the proposed project would occur within the active UPRR ROW similar to existing conditions and within previously disturbed areas within the Martinez Terminal property. Therefore, no impact to sensitive natural communities would occur during operation of the proposed project.

BIO-3 Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Construction

No protected wetlands occur within the portion of the project site located within the existing UPRR ROW. Construction of the proposed operating industry tracks and associated retaining walls within the Martinez Terminal property in the western portion of the project site would occur adjacent to aquatic resources. Three perennial features were identified within the biological resources study area; however, only Aquatic Feature 2 is located within the project footprint. Aquatic Feature 2 exhibits a perennial system, relatively permanent waters (RPW), and a continuous surface connection to downstream Traditional Navigable Waters. Accordingly, this feature is considered subject to USACE jurisdiction pursuant to Section 404 of the Clean Water Act and subject to the jurisdiction of the RWQCB. However, Aquatic Feature 2 is not classified as a streambed or lake, and does not contain any associated riparian habitat, and is therefore not considered subject to jurisdiction of CDFW under CFGC Section 1600 *et seq*. Table 3.2-2 shows the jurisdictional resource present within the project site. As shown in Table 3.2-2, the resources under the jurisdiction of the USACE and RWQCB totals approximately 0.17-acre of wetland waters of the U.S. and 0.10-acre of non-wetland waters of the U.S.

Table 3.2-2: Federal and State Jurisdictional Resources within the Project Site

Impact Type	Acreage	
	Federal (USACE) and State (RWQCB)	
	Wetland Waters of the US	Non-Wetland Waters of the US
Temporary	0.11	0.09
Permanent	0.06	0.01
Total	**0.17**	**0.10**

Source: Appendix C.

As shown in Table 3.2-2, construction of the proposed project would result in temporary and permanent impacts to wetlands under the jurisdiction of the USACE and RWQCB, reducing the amount of jurisdictional waters within the project site. As such, implementation of the proposed project would require a Waste Discharge Requirement Permit pursuant to Section 401 of the Clean Water Act and Section 13263 of the Porter-Cologne Act prior to commencement of construction activities occurring within jurisdictional aquatic features. Payment of fees pursuant to RWQCB regulations would also be required. Additionally, the USACE regulates activities that result in the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the Clean Water Act. A Nationwide Permit under Section 404 was previously issued for the Martinez Terminal property in 2014 (USACE File No. 2012-000275S). Formal notification to and subsequent authorization from the USACE may be required prior to commencement of construction activities within USACE jurisdictional features. As such, the Project Applicant would be required to coordinate with the USACE and RWQCB pursuant to permitting requirements under the Clean Water Act Sections 401 and 404 and the Porter-Cologne Act. Furthermore, Mitigation Measure BIO-D outlines additional measures to minimize impacts to protected wetlands during construction. With adherence to existing permitting requirements and implementation of Mitigation Measure BIO-D, impacts to protected wetlands would be less than significant during construction.

Operation

No protected wetlands occur within the portion of the project site located within the exiting UPRR ROW. Following completion of construction activities, operations within the western portion of the project site would occur within areas that have been covered under regulatory permits obtained for the proposed project. Therefore, no impacts to protected wetlands would occur during operation of the proposed project.

BIO-4 Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Construction

As discussed in Section 3.3.2, the project site and surrounding area contains habitat that supports a variety of species of invertebrates, amphibians, reptiles, birds, and mammals, and the range of many of these species extend into and through the open spaces adjacent to the project site. The biological resources study area is largely developed and borders large open space areas including the Waterbird Regional Preserve, Point Edith Wildlife Area, and Suisun Bay.

Movement on a smaller or “local” scale occurs throughout the surrounding vicinity as well as within the undeveloped portions of the biological resources study area. Populations of animals such as insects, amphibians, reptiles, small mammals, and a few bird species are unlikely to find all their resource requirements within the project site, and therefore only likely to traverse the project site on an occasional basis while moving throughout their ranges and dispersing. Movement on a larger, “regional” scale is unlikely to occur to and from the project site due to the limited availability of resources within the project site and, given the proximity to large open spaces adjacent to the project site, is likely to consist primarily of transients. The disturbed and developed nature of the project site and lack of resources provided within likely hinder wildlife movement in the form of travel routes.

Further, the MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. As previously discussed, construction of the proposed project could affect migratory birds which are protected pursuant to the MBTA and CFGC. As such, Mitigation Measure BIO-C would be implemented, which requires project construction occur outside of the nesting bird breeding season, if feasible; if this is infeasible, then a qualified biologist would conduct bird surveys on site, and establish buffers and continued monitoring if a protected bird is found. With implementation of Mitigation Measure BIO-C, impacts to migratory wildlife would be less than significant during construction.

Operation

Following completion of construction activities, operation of the proposed project would occur within the active UPRR ROW similar to existing conditions and within previously disturbed areas within the Martinez Terminal property. Therefore, no impacts to a migratory wildlife corridor, movement by native or migrating wildlife, or a native wildlife nursery would occur during operation of the proposed project.

BIO-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction

The City of Martinez Tree Removal Permit Ordinance (Municipal Code Section 8.08.044) regulates the removal of protected trees, including those located on developed lands within an industrial zone. As discussed in Chapter 2, Project Description, several ornamental trees and vegetation within and near the project site would need to be trimmed or removed during construction. Trees within and adjacent to the project site consist of non-native, ornamental species, such as Tasmanian blue gum, acacia, Peruvian pepper tree, and cotoneaster. If construction activities would require the removal of any trees meeting the size criteria for protected trees on industrial lands, the proposed project would be required to obtain a Tree Removal Permit from the City pursuant to Municipal Code Section 8.08.044. Additionally, City of Martinez Municipal Code Section 8.24.090 prohibits the handling or possession of birds, eggs, and/or nests. The special-status bird species that were observed on site and/or have the potential to occur within the project site may utilize existing trees in the project vicinity for nesting. However, as discussed in the impact analysis under Threshold BIO-1, Mitigation Measure BIO-C would be implemented in order to survey, avoid, monitor, and protect any nesting sites identified on site in order to reduce impacts to nesting birds. Implementation of Mitigation Measure BIO-C would coincide with compliance with City of Martinez Municipal Code Section 8.24.090. With adherence to existing municipal code requirements and implementation of Mitigation Measure BIO-C, the proposed project would not conflict with any local policies or ordinances protecting biological resources and impacts would be less than significant during construction.

Operation

Following completion of construction activities, operation of the proposed project would occur within the active UPRR ROW similar to existing conditions and within previously disturbed areas within the Martinez Terminal property. Therefore, operation of the proposed project would not conflict with any local policies or ordinances protecting biological resources, and no impact would occur.

3.2.5 Mitigation Measures

The following mitigation measures would be required to reduce impacts to special-status plant and wildlife species.

BIO-A Prior to construction, and during the appropriate blooming periods for special-status plant species with the potential to occur within the project site, a qualified biologist shall have conducted focused rare plant surveys across the entire project site following 2018 California Department of Fish and Wildlife (CDFW) and/or 2001 California Native Plant Society (CNPS) guidelines to determine presence or absence of special-status plant species. The surveys shall be floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity) and include site visits covering early, mid, and late-blooming season species.

If populations of special-status plants are found during the survey and they are located within permanent or temporary impact areas, avoidance and minimization measures shall be explored to protect the special-status plant population(s). If avoidance is not possible, consultation with CDFW shall be required prior to project initiation to identify suitable compensatory mitigation for the unavoidable loss of these species. Preparation of a Habitat Mitigation and Monitoring Plan (HMMP) detailing relocation, salvage, and/or

restoration of impacted species and subsequent maintenance and monitoring; payment of an in-lieu fee to an agency approved mitigation bank; or acquisition of off-site lands to be held in a restrictive deed for perpetuity would be required to compensate for the loss of habitat occupied by any non-listed special-status plant species found on-site. In the unlikely event a State or federally listed plant species is present and avoidance is not feasible, consultation with CDFW and/or U.S. Fish and Wildlife Service (USFWS) would be required prior to initiating any on-site project activities to coordinate any take permits pursuant to State and/or federal regulations and requisite compensatory mitigation.

BIO-B Prior to the start of project construction, a qualified biologist shall be identified and serve as the lead biological monitor to ensure that impacts to all biological resources are minimized or avoided, and shall conduct (or supervise) pre-construction field surveys for species that may be avoided, affected, or eliminated as a result of vegetation removal, grading, or any other project activities. The lead biological monitor shall ensure that all surveys are conducted by qualified personnel and that they possess all necessary permits and memoranda of understanding with the appropriate agencies for the handling of potentially occurring special-status species. The lead biological monitor shall also ensure that daily monitoring reports (e.g., survey results, protective actions, results of protective actions, adaptive measures, etc.) are prepared, and shall make these monitoring reports available upon request.

A qualified biologist shall present a Worker Environmental Awareness Program (WEAP) to all construction crews and contractors prior to starting any work on the project site. The WEAP training would include a review of the special-status species and other sensitive resources that could exist in the project area, the locations of sensitive biological resources as well as their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all personnel trained shall be maintained and submitted upon request.

Project limits shall be clearly delineated with fencing or other boundary markers prior to the start of construction. During construction, construction workers shall strictly limit their activities, vehicles, equipment, and construction materials to the designated construction limits and staging areas.

The biological monitor shall be present during vegetation removal and ground-disturbing activities to inspect and enforce mitigation requirements, conduct daily clearance surveys of work areas, and to relocate any species that may come into harm’s way to an appropriate offsite location of similar habitat. The biological monitor shall be authorized to stop specific grading or construction activities if violations of mitigation measures or any local, state, or federal laws are suspected. If ongoing biological monitoring of construction activities reveals the presence of any special-status wildlife within an active work area, then work shall be temporarily halted until the animals leave on their own volition or can be collected and relocated to areas outside of the designated work zones. Any non-listed special-status species occurring within the work area shall be collected and relocated to areas outside of the designated work zones. In the unlikely event a federal or State listed species is identified during surveys, no work shall be allowed within 500 feet of the species, and the appropriate trustee agencies (California Department of Fish and Wildlife or U.S. Fish and Wildlife Service) shall be consulted first to determine an appropriate course of action. Upon completion of vegetation and earth disturbance activities, the biological monitor shall be available to conduct as needed

spot checks during construction and respond to requests from project personnel as they arise to remove wildlife, answer any questions, and generally provide as-needed support to confirm project measures are implemented.

During construction, all equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas within the project limits. Equipment shall be checked daily for leaks prior to operation and repaired as necessary, and secondary containment shall be implemented during equipment and vehicle staging. During construction, the project limits shall be kept as clean of debris and trash as possible to avoid attracting predators of sensitive wildlife. Food-related trash items shall be kept in sealed containers and removed daily from the construction work zone.

BIO-C Proposed construction activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the nesting bird season, which generally runs from February 1 through August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. Depending on the avian species present, a qualified biologist may determine that a change in the breeding season dates is warranted.

If avoidance of the avian breeding season is not feasible, a qualified biologist with experience in conducting breeding bird surveys shall conduct two bird surveys, fourteen (14) days and no more than three (3) days, prior to project activities to detect protected birds occurring on-site and, as access to adjacent areas allows, other suitable habitats within 500 feet of the project site. If a protected bird is found, the project proponent may delay all project activities within 300 feet of on- and off-site suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist may continue the surveys to locate any nests. If an active nest is located, project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. A reduced buffer can be established if determined appropriate by the project biologist.

The biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor shall prepare and provide upon request monitoring reports during the grubbing and clearing of vegetation.

BIO-D The following measures shall be implemented to minimize construction impacts to protected wetlands:

- Project materials shall not be cast from the project site into nearby habitats; further, project-related debris, spoils, and trash shall be contained and removed to a proper disposal facility.
- All construction equipment shall be inspected and cleaned prior to use in the project footprint to minimize the importation of non-native plant material. All mulch, topsoil, and seed mixes used during post-construction landscaping activities and erosion control Best Management Practices shall be free of invasive plant species propagules. A weed abatement program shall be implemented should invasive plant species colonize the area within the project footprint post-construction.

3.2.6 Level of Significance After Mitigation

Implementation of Mitigation Measures BIO-A, BIO-B, BIO-C, and BIO-D would ensure that impacts to biological resources would be less than significant.

3.2.7 Cumulative Impacts

As discussed in Section 3.2.5, Impact Analysis, the proposed project would incorporate mitigation measures to reduce potential impacts to special-status species, wetlands, and migratory birds. The project site does not support riparian habitat or wildlife corridors; as such, the proposed project's less than significant impacts would not be cumulatively considerable. Similar to the proposed project, the related projects would also be required to comply with applicable State, federal, and local regulations concerning biological resources. Therefore, implementation of the proposed project in combination with the related projects would not contribute to cumulatively significant impacts to biological resources.

3.3 CULTURAL RESOURCES

The purpose of this section is to identify existing cultural resources within and around the project site and to assess the significance of such resources. Project impacts to tribal cultural resources are evaluated in Section 3.11 of this EIR. The analysis in this section is based on the *Cultural Resources Identification Memorandum for Martinez Terminal Rail Restoration Project, City of Martinez, Contra Costa County, California* (Cultural Resources Memo), prepared by Michael Baker International, dated February 2025 (Appendix D); and *Supplemental Cultural Resource Study, TransMontaigne Railroad Spur Project Martinez, Contra Costa County, California*, prepared by LSA, dated January 2025 (see Attachment 2 of Appendix D).

3.3.1 Regulatory Setting

Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966 established the National Register of Historic Places (National Register) as "an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation's historic resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR 60.2).[1] Properties which are listed in or have been formally determined eligible for listing in the National Register of Historic Places (NRHP) are automatically listed in the California Register of Historic Places (CRHR). The NRHP recognizes properties that are significant at the national, State, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it meets one or more of the following criteria:

- Criterion A (events): It is associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B (persons): It is associated with the lives of persons significant in our past; or
- Criterion C (architecture): It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D (information potential): It has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting at least one of the above designation criteria, resources must also retain integrity, or enough of their historic character or appearance to be "recognizable as historical resources and to convey the reasons for their significance." The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined in the following manner:

- Location: The place where the historic property was constructed or the place where the historic event occurred; or

[1] Code of Federal Regulations, Title 36, Part 60.2.

- Design: The combination of elements that create the form, plan, space, structure, and style of a property; or
- Setting: The physical environment of a historic property; or
- Materials: The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property;
- Workmanship: They physical evidence of the crafts of a particular culture or people during any given period in history or prehistory; or
- Feeling: The property's expression of the aesthetic or historic sense of a particular period of time; or
- Association: The direct link between an important historic event or person and a historic property

Secretary of the Interior's Professional Qualifications Standards

The Secretary of the Interior's Professional Qualifications Standards define minimum education and experience required to perform historic resources identification, evaluation, registration, and treatment activities.

State

California Register of Historical Resources

The CRHR is an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (Public Resources Code [PRC] Section 5024.1[a]). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (PRC Section 5024.1[b]). Certain properties are determined by the statute to be automatically included in the CRHR by operation of law, including California properties formally determined eligible for, or listed in, the NRHP. Properties are eligible for listing in the CRHR if they meet one or more of the NRHP criteria listed above (i.e., Criterion A [events] through Criterion D [information potential]).

In addition, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a] and [b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Criterion 1: Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or
- Criterion 2: Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Criterion 3: Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097

California Health and Safety Code Section 7050.5, and PRC Sections 5097.94 and 5097.98 outline procedures to be followed in the event human remains are discovered during the course of California projects. If human remains are encountered, all work must stop at that location and the County Coroner must be immediately notified and advised of the finding. The County Coroner would investigate "the manner and cause of any death" and make recommendations concerning treatment of the human remains. The County Coroner must make their determination within two working days of being notified. If the human remains are determined to be Native American, the County Coroner shall contact the California Native American Heritage Commission. The Commission would immediately notify those persons it believes to be most likely descendants, and would request the descendants to inspect the site and make recommendations for the disposition of the discovered human remains.

Public Resources Code Section 5097.5(a)

PRC Section 5097.5(a) specifies that a person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, or archaeological sites, which can include fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

Local

City of Martinez Municipal Code

City of Martinez Municipal Code Chapter 22.47, *Historic Resource Provisions*, establishes the framework for the preservation of structures and districts which significantly contribute to the cultural and architectural heritage of the City. The provisions of this Chapter apply Citywide.

City of Martinez General Plan

The General Plan Historic, Cultural, and Arts Element contains goals, policies, and implementation measures regarding cultural resources throughout the City. Goals and policies relevant to the proposed project include the following:

- Goal HCA-G-1: Foster protection, preservation, and rehabilitation of Martinez's historic and cultural heritage.
    - Measure HCA-I-1.1f: Avoid or mitigate to the maximum feasible extent impacts of development on Native American archaeological and cultural resources.
    - Measure HCA-I-1.1g: Require a historical, cultural and archaeological survey prior to approval of any project where a known historic, archaeological, or other cultural resource is located, where there is a structure more than 50 years old, which would require excavation in an area that is known to be sensitive for cultural or archaeological resources, or is on land that has not been significantly disturbed previously. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures identified by a qualified professional shall be implemented, such as avoidance, capping of the resource site, or documentation and conservation, to reduce adverse impacts to the resource.
    - Measure HCA-I-1.1h: Require all new development, infrastructure, and other ground disturbing projects to comply with the following conditions in the event of

an inadvertent discovery of cultural resources, archaeological resources, or human remains:

a) If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the City shall be notified, and the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protections and preservation measures. Work may only resume when appropriate protections recommended by the qualified professional are in place and have been approved by the City.

b) If human remains are discovered during any ground disturbing activity, work shall stop until the City and the Contra Costa County Coroner have been contacted and, if the remains are determined to be of Native American origin, consult with the Native American Heritage Commission for applicable State laws and codes, including identifying the most likely descendants for consultation on appropriate measures and special circumstances. Work may only resume when appropriate measures have been taken and approved by the City.

- Policy HCA-P-1.7: Encourage new development to be compatible with adjacent historic structures in scale, massing, building materials, and general architectural treatment.
- Policy HCA-P-1.10: Comply with State and federal laws to preserve and protect archaeological resources by complying with assessment and recovery of the resources.

3.3.2 Environmental Setting

Cultural Setting

Prehistoric Period

Archaeological data indicates that human occupation in California occurred during the Early Holocene (11,500–7,000 years before present). Archaeological sites from this period are rarely encountered in the Bay Area due to sea level rise and the fact that old sites tend to be deeply buried. In the Middle and Late Holocene, population density and cultural diversity increased, leaving more archaeological sites.

The Paleoindian period in California is typically dated between approximately 13,550 and 10,550 years before present. Archaeological evidence of Paleoindian sites indicated hunting adaptation characterized by large, fluted projectile points and hunting of megafauna and other faunal resources for inland sites. Early people along the coast, dubbed “Paleocoastal” cultures, subsisted by hunting marine mammals, fishing, and collecting shellfish. Sites from this period and culture occur along the coasts and offshore islands, representing a significant watercraft technology required to reach them. Materially, sites are composed of shell middens with lithic bifaces, crescents, and barbed projectile points. As is the case in much of California, very few sites of this period are known in the region of the North Coast Ranges.

Several sites in Contra Costa County date to the Lower Archaic period and typically contain artifacts consistent with a mobile hunting and gathering economy. Mobile foragers appeared to have resided in camps situated along marshes and on grasslands and took advantage of a wide array of resources available in the surrounding uplands on a seasonal basis. The artifacts found

in archaeological sites dating to this period include large, wide-stemmed projectile points, cobble tools, handstones, and milling slabs.

Mobile foragers in the Bay Area region during the Middle Archaic period resided in camps situated along marshes and on grasslands, and used the surrounding uplands for resources on a seasonal basis, albeit on a more limited basis. Mortars and pestles first appear in sites dating to this period, which is thought to signal an increased dietary reliance on acorns rather than hard seeds and an associated increase in sedentism.

At the time of Spanish intrusion into California, the project vicinity was occupied by a group known to descendant communities and anthropologists as the Ohlone (formerly known as the Costanoans). The Ohlone occupied the California coast stretching from the San Francisco Bay to Monterey Bay and into the lower Salinas Valley. The Ohlone are a group of ethnically diverse peoples who traditionally spoke more than 50 related languages that together formed a sub-family of the Utian language family. Specifically, the area was occupied by the Karkin, or Carquin.

Historic Period

A land grant, Rancho Pinole, was made in 1842 to Ygnacio Martinez. In 1849, following the close of the Mexican-American War, the Martinez family subdivided a part of the Rancho Pinole and established Martinez, which was designated the seat of Contra Costa County in 1851.

In 1877, the California Pacific Railroad constructed a line from Roseville to Oakland. The railroad passed through Martinez before taking a rail ferry from Port Costa. In 1885, the railroad was leased to the Southern Pacific Railroad, which purchased it outright in 1898. The railroad allowed for the industrial development of Martinez. In 1930, the railroad ferry was replaced with a railroad bridge. The Southern Pacific Railroad merged with the Union Pacific Railroad on September 11, 1996.

The deep-water harbor and rail connections drew the petroleum industry to Martinez. In 1915, Shell Oil established a refinery in Martinez. Associated Oil followed by establishing a refinery near Martinez. The petroleum industry fostered Martinez's growth in the twentieth century.

Project Site

Site Development History and Historic Context

The earliest available maps of the project vicinity are *diseños* of Rancho las Juntas. These maps, prepared for land claims, show no development of the project site. General Land Office maps generated in 1870 and 1914 show the surrounding salt marshes and the town of Martinez, but they are limited in the level of development they depict, and the 1914 map does not even show the railroad.

United States Geological Survey maps show the evolution of the project site over time. In 1896, 1898, and 1901, the railroad passes through the project site, crossing salt marshes. The spur has not yet been constructed. The future location of the spur and the Martinez Terminal industrial property is a point jutting into a salt marsh.

By 1940, Waterfront Road has been constructed in the project vicinity, and the map notes an overpass at the bridge crossing. A railroad spur appears in this map, to the west of the present railroad spur and extending all the way to Suisun Point northwest of the project area. Two buildings are shown in what is now the Martinez Terminal industrial property, and the word "ZINC" appears on the point. This is likely the site of one of the zinc extraction facilities that once stood

on the Martinez waterfront. The 1942 map no longer shows the railroad spur but does show the levee on which it was located.

By 1951, a dirt road entered the project site from Waterfront Road. A stack stands in the future Martinez Terminal industrial property, and slag is noted on the northeast slope of the point. Other than the main railroad track, the project site itself is undeveloped.

The year 1959 shows the first major developments on the project site that resemble the Martinez Terminal industrial property as it currently exists. Several tanks appear in the Martinez Terminal industrial property, and much of the surrounding marsh has been reclaimed. The project site continues to be similarly developed into present day.

Buried Archaeological Resources Sensitivity

There is low sensitivity for buried archaeological resources in the center of the project site due to past development and disturbances. It is similarly low at the surface at the east and west ends of the project site due to past disturbances but increases with depth.

The Panoche Formation sandstone located in the rise (upper few inches) in the center of the project site is greater than 65 million years old, which is considered too old to contain archaeological deposits. The soils underneath the Panoche Formation in this portion of the project site are mapped as Alamont clay. The portion of these deposits located up to 14 inches below the surface have the potential to contain archaeological deposits if undisturbed. As such, the shallow Alamont clay deposits in this area have the potential to include archaeological resources.

The Holocene-age Bay Mud clay is present in the east and west boundaries of the project site and is coterminous with human occupation of the region. These soils are often very deep, with the H horizon (soil layer containing organic material) in a typical profile greater than 60 inches thick, and have the potential to cover archaeological resources. Buried resources may include those flooded by estuaries due to sea level rise. One notable site on the San Francisco Peninsula, CA-SFR-220, is submerged and buried beneath 10 to 12 feet of Bay Mud; it is approximately 7,900 years old and is the oldest known archaeological site in the San Francisco Peninsula. Soils close to the surface, within the first 3 feet below ground surface, throughout the project site are anticipated to be disturbed due to past railroad construction, road construction, and the construction of the Martinez Terminal facility and associated utilities trenching. However, deeper Holocene estuary deposits have a moderate to high potential for buried archaeological resources.

3.3.3 Methodology

The analysis in this section is based on the results of the Northwest Information Center (NWIC) records search; archival research, literature, historical map, and aerial photograph review; Native American Heritage Commission (NAHC) Sacred Lands File search; historical society consultation; and 2025 *Supplemental Cultural Resources Study* (see Attachment 2 of Appendix D).

Records Search

Literature searches of the NWIC and NAHC Sacred Lands File were conducted to identify previous cultural resources studies and previously recorded cultural resources within a half-mile radius of the project site. The NAHC Sacred Lands File search was conducted on October 5, 2021; the result of the search was negative. The NWIC search was conducted on September 8, 2021; the results of that search are summarized below in the discussions of previous cultural resources studies and previously recorded cultural resources.

In addition to these records searches, the NRHP, Built Environment Resources Directory (BERD) for Contra Costa County, and the California Historical Resources were consulted. The BERD directory includes built resources reviewed for eligibility by the California State Historic Preservation Office (SHPO) for the National Register and the California Historical Landmarks programs through federal and state environmental compliance laws, and built resources nominated under federal and state registration programs, including the National Register, CRHR, California Historical Landmarks, and California Points of Historical Interest. The California Historical Resources directory includes resources listed in the National Register, CRHR, California State Landmarks, and California Points of Historical Interest.

Previous Cultural Resources Studies

Eighteen cultural resources studies have previously been completed within 0.5 mile of the project site. Three of the studies overlapped the project site. In addition to the documents filed at the NWIC, two additional reports were conducted for the project site (see Attachment 2 of Appendix D).

Previously Recorded Cultural Resources

A total of five resources are documented within 0.5 mile of the project site. Of these, one resource partially intersects the project site: P-07-000500, the Southern Pacific – Northern Contra Costa Route, Segment SPN-7. This resource consists of a single set of railroad tracks and associated railroad spur tracks. The resource was first evaluated in 1995 as part of the Mojave Natural Gas Pipeline, Northern Expansion Project. The resource was found not eligible for inclusion in the National Register due to a lack of integrity. The resource was revisited in 2021, at which time it was found that the portion of the spur track connecting it to the main track had been removed. The resource was again evaluated and found not eligible for inclusion in the National Register.

Surveys

As described in the Cultural Resources Memo, a pedestrian survey was conducted in October 2021 and included the main railroad track and right-of-way (ROW), the area between the ROW and Waterfront Road at the east end of the project site, the abandoned railroad spur and adjacent access road stretching northwest of the main track, and the wetland area west of the spur road. The survey was conducted in approximately five-meter-wide transects. Only that part of the project site where piping would be installed from the rail car unloading area to the bulk storage tanks was not surveyed. However, that part of the project site is completely developed with no ground visibility. In addition, a supplemental archaeological survey was conducted in November 2024 and a supplemental built environment survey was conducted in January 2025 in order to examine additions to the project site not included in the initial survey.

Two resources were identified as a result of the surveys. Isolate LSA-TMO2101-I-1 is a solarized (amethyst) glass bottle fragment with a tooled finish. P-07-000500, the Southern Pacific – Northern Contra Costa Route, Segment SPN-7, is railroad tracks and associated spur railroad track.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to cultural resources are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5; or
- Disturb any human remains, including those interred outside of dedicated cemeteries.

3.3.4 Impact Analysis

CUL-1 Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Construction

Construction of the proposed project would include ground-disturbing activities, such as grading and excavation. As discussed in Section 3.3.3, two resources were identified within the project site during the pedestrian survey. LSA-TMO2101-I-1, a solarized (amethyst) glass bottle fragment with a tooled finish, is an isolated artifact deemed ineligible for inclusion in the CRHR based on the following evaluation:

- Criterion A: This glass fragment is not associated with specific events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. Therefore, the isolated artifact is recommended not eligible for listing in the CRHR under Criterion A.
- Criterion B: It is not associated with the lives of persons important to local, California or national history. Therefore, the isolated artifact is recommended not eligible for listing in the CRHR under Criterion B.
- Criterion C: The glass fragment does not embody the distinctive characteristics of a type, period, region, or method of construction or represent the work of a master or possess high artistic values. Therefore, the isolated artifact is recommended not eligible for listing in the CRHR under Criterion C.
- Criterion D: Finally, the glass fragment has not, and does not have the potential to, yield information important to the prehistory or history of the local area, California, or the nation. Therefore, the isolated artifact is recommended not eligible for listing in the CRHR under Criterion D.

Lacking significance, this resource is recommended as ineligible for listing in the NRHP or CRHR. Therefore, the isolated artifact, LSA-TMO2101-I-1, is not a historical resource as defined by PRC Section 15064.5(a).

The second resource identified at the project site, P-07-000500, is the Southern Pacific – Northern Contra Costa Route, Segment SPN-7, consisting of a single set of railroad tracks and associated railroad spur tracks. This resource was previously evaluated twice for its potential eligibility for the NRHP, and both evaluations found the resource ineligible for inclusion in the NRHP. The following is an evaluation of the segment of the railroad located within the project site for its eligibility for inclusion in the CRHR:

- Criterion A: The railroad was initially constructed between 1872 and 1878. However, it has been consistently used, and therefore repeatedly altered, since its construction. While the railroad contributed to the development of Contra Costa County, Martinez, and the local oil industry, it does not represent any single event or pattern of events that have made a significant contribution to an associated historic context. Although it was constructed during a period of rapid growth in Martinez, the resource is not directly related to the City's significant late nineteenth and early twentieth century development trends. The use of the railroad segment is not associated with any significant events at the local, state, or national level. Therefore, the resource is recommended not eligible for listing in the CRHR under Criterion A.
- Criterion B: Research failed to indicate that the railroad segment is directly associated with the lives of persons who significantly contributed to local, State, or national culture and history. A number of engineers, builders, and others constructed and used the railroad, but this segment is not specifically or exceptionally important to their lives or careers. Therefore, the resource is recommended not eligible for listing in the CRHR under Criterion B.
- Criterion C: The railroad segment within the project site consists of a single set of railroad tracks and associated (but now disconnected) railroad spur, consisting of rail, ballast, and ties. This segment of tracks is a standard engineering feature, typical of twentieth century railroad tracks found across California and the nation, that has been continuously maintained and updated during its approximately 150 years of use. The track is typical in size, scale, and design, and does not exhibit character-defining features of any architectural style. It is not a notable example of railroad tracks, nor is it the work of a master engineer or builder. Therefore, the resource is recommended not eligible for listing in the CRHR under Criterion C.
- Criterion D: The resource is not likely to yield valuable information which will contribute to the understanding of human history. The resource is a standard engineering feature, restricted to what is visible on the surface, and has been continuously maintained and modified. The data it provides is exhausted by previous documentation. The resource is not and never was the principal source of important information. Therefore, the property is recommended not eligible for listing in the CRHR under Criterion D.

Lacking significance, this resource is recommended as ineligible for listing in the NRHP and CRHR. Therefore, the Southern Pacific – Northern Contra Costa Route, Segment SPN-7, P-07-000500, is not considered a historical resource as defined by PRC Section 15064.5(a).

As shown, neither of the two resources identified at the project site were determined to be eligible for listing in the NRHP or CRHR, or a historical resource as defined by PRC Section 15064.5(a). Therefore, construction of the proposed project would not cause a substantial adverse change in the significance of any historical resources, and no impact would occur.

Operation

Operation of the proposed project would include the transport and storage of petroleum products at the project site via railroad. No historical resources as defined by PRC Section 15064.5 were identified within the project site. Therefore, no impact to historical resources associated with operation of the proposed project would occur.

CUL-2 Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Construction

As described in Chapter 2, Project Description, site preparation activities would include excavation and grading of existing soil. The maximum depth of construction related excavation would be approximately 16 feet below the ground surface, with average excavation depths for track areas being 5 feet below the ground surface. The archaeological sensitivity analysis identified low sensitivity at shallow depths, but moderate to high sensitivity for deeper excavations in the Bay Mud located at either end of the project site, as previously described in Section 3.3.2. As such, implementation of Mitigation Measure CUL-A, which outlines the procedures for a Worker Environmental Awareness Program prior to the start of construction, would be required to inform the construction crew of procedures related to inadvertent discovery of archaeological resources during ground-disturbing activities. Additionally, Mitigation Measure CUL-B would require that an archaeological monitor be present during ground-disturbing activities in all areas with potential to contain significant cultural deposits, including the east and west side of the project site, where geologic maps indicate Holocene deposits exist. Furthermore, in the event that any subsurface archaeological resources are encountered during earth-moving activities, Mitigation Measure CUL-C would require work to be halted within 100 feet of any findings until an archaeologist can evaluate them, consistent with General Plan Implementation Measure HCA-I-1.1h(a). Pursuant to General Plan Implementation Measure HCA-I-1.1h(a), work may only resume when appropriate protections recommended by the qualified professional are in place and have been approved by the City. Therefore, with implementation of Mitigation Measures CUL-A through CUL-C and adherence to existing regulatory requirements, impacts related to archaeological resources would be less than significant during construction.

Operation

Operation of the proposed project would include the transport and storage of petroleum products at the project site via railroad. Project operation would not require ground-disturbing activities that would have the potential to impact previously unrecorded archaeological resources. Therefore, no impact associated with operation of the proposed project would occur.

CUL-3 Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Construction

Due to the level of past disturbance within the project site, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or ground-disturbing activities. Nonetheless, if human remains are found, those remains would require proper treatment, in accordance with applicable laws as well as General Plan implementation Measure HCA-I-1.1h(b). State of California Health and Safety Code Section 7050.5 through 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Health and Safety Code Sections 7050.5 and 7051 would be implemented, including notification of the County Coroner, notification of the NAHC, and consultation with the individual identified by the NAHC to be the most likely descendant. If human remains are found during excavation, excavation must stop near the find and any area that is reasonably suspected to overlay adjacent remains until the County Coroner has been called out, the remains have been investigated, and appropriate recommendations have been made for the treatment and

disposition of the remains. With adherence to existing regulatory requirements, impacts related to the disturbance of human remains would be less than significant.

Operation

Operation of the proposed project would include the transport and storage of petroleum products at the project site via railroad. Project operation would not require ground-disturbing activities that would have the potential to impact buried human remains. Therefore, no impact associated with operation of the proposed project would occur.

3.3.5 Mitigation Measures

To reduce potential significant impacts related to inadvertent discovery of archaeological resources during ground-disturbing activities, the following mitigation measures would be implemented during construction the proposed project:

CUL-A **Worker Environmental Awareness Plan:** Prior to the beginning of the earth-moving construction activities, the construction crew shall be informed of the nature of cultural resources and the regulatory protections afforded those resources. The crew shall also be informed of procedures relating to the discovery of unanticipated resources. The crew shall be cautioned not to collect artifacts, and directed to inform a construction supervisor and the on-site archaeological monitor in the event that cultural resources or human remains are discovered during the course of construction, including when a cultural resources monitor is not present. The on-site monitor shall administer supplemental briefing to all new construction personnel, prior to their commencement of earth-moving construction activities.

CUL-B **Archaeological Resources Monitoring:** Archaeological monitoring for all ground-disturbing activities that have the potential to encounter archaeological resources shall be conducted by a qualified archaeological monitor who is working under the guidance of an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology (48 Federal Register 44738). Ground-disturbing activities include, but are not limited to, geotechnical boring, boring, trenching, grading, and excavating. The archaeological monitor shall observe ground-disturbing activities in all areas with potential to contain significant cultural deposits. These locations are anticipated to include the east and west side of the project site, where geologic maps indicate Holocene deposits exist. If, during the course of project excavations, the qualified archaeologist determines that archaeological sensitivity within the project site is low due to prior disturbances, then monitoring may be reduced or eliminated at the discretion of the qualified archaeologist.

CUL-C **Archaeological Resources Inadvertent Discovery:** In the event that any subsurface cultural resources are encountered during earth-moving activities, it is recommended that all work within 100 feet be halted until an archaeologist can evaluate the findings and make recommendations. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include wood, stone, or concrete footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, metal, glass, ceramics, and other refuse. The archaeologist will evaluate the find in accordance with federal, state, and local guidelines, including those

set forth in the PRC Section 21083.2, to assess the significance of the find and identify avoidance or other measures as appropriate.

3.3.6 Level of Significance After Mitigation

Implementation of Mitigation Measures CUL-A through CUL-C would ensure that impacts related to the inadvertent discovery of archaeological resources during project construction would be less than significant.

3.3.7 Cumulative Impacts

Impacts to cultural resources tend to be site-specific. However, cumulative impacts would occur if a series of actions led to the loss of a resource. For example, while the loss of a single historic building may not be significant to the character of a neighborhood or streetscape, continued loss of such resources on a project-by-project basis could constitute a significant cumulative effect. This is most obvious in historic districts, where destruction or alteration of a percentage of the contributing elements may lead to a loss of integrity for the district overall. The project site is not a designated historical resource nor is it part of a historical district; accordingly, project implementation in combination with the related projects would not result in a cumulatively considerable impact to historical resources. Similarly, there are no known buried archaeological resources or human remains on the project site. Similar to the proposed project, related projects would be required to comply with Health and Safety Code Sections 7050.5 and 7051, PRC Section 5097.5(a), and the General Plan, which address the discovery and recovery of unknown historical and archaeological resources and human remains. Mandatory adherence to these regulatory requirements for the proposed project and related projects would reduce the potential to cause a cumulatively considerable effect. As such, the proposed project's impacts to cultural resources would not be cumulatively considerable, and cumulative impacts related to cultural resources would be less than significant.

3.4 ENERGY

This section evaluates the potential impacts on energy resources resulting from construction and operation of the proposed project, with potential short- and long-term energy consumption impacts. This section evaluates the project's impacts regarding the avoidance of wasteful and inefficient energy usage. This section is based in part on the Air Quality, Energy, and Greenhouse Gas Emissions Calculations included as Appendix B.

3.4.1 Regulatory Setting

Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 was enacted to improve vehicle fuel economy and help reduce dependence on foreign oil. Specifically, the act increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard, which requires fuel producers to use at least 36 billion gallons of biofuel by 2022 and reduces the nation's demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020, an increase in fuel economy standards of 40 percent. On June 21, 2023, the U.S. Environmental Protection Agency (USEPA) announced a final rule to establish biofuel volume requirements and associated percentage standards for cellulosic biofuel, biomass-based diesel, advanced biofuel, and total renewable fuel for the years 2023 to 2025. The act also sets energy efficiency standards for lighting and appliances.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act was enacted in 1975 and established fuel economy standards for new light-duty vehicles sold in the United States. As a result of the act, the National Highway Traffic Safety Administration was tasked with establishing and regularly updating vehicle standards.

Corporate Average Fuel Economy Standards

Established by the US Congress in 1975, the Corporate Average Fuel Economy (CAFE) Standards (49 Code of Federal Regulations [CFR] Parts 531 and 533) set fuel economy standards for all new passenger cars and light trucks sold in the United States. The National Highway Traffic Safety Administration and the USEPA jointly administer the CAFE standards, which become more stringent each year.

In August 2016, the USEPA and National Highway Traffic Safety Administration announced the adoption of phase two programs related to the fuel economy and greenhouse gas (GHG) emissions standards for medium- and heavy-duty trucks. The phase two program applied to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards were expected to lower carbon dioxide (CO_2) emissions by approximately 1.1 billion metric tons of CO_2 ($MTCO_2$) and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program. The National Highway Traffic Safety Administration and the USEPA jointly published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program" (SAFE I Rule) in September 2019 and issued the Final SAFE Rule (i.e., SAFE Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks) in April 2020. The SAFE I Rule relaxed federal CAFE vehicle standards and revoked California's authority to set its own vehicle standards. On December 29, 2021, the National Highway Traffic Safety Administration issued the final rule to repeal the SAFE I Rule, effective

January 28, 2022, which removes the improper restrictions placed on states and local governments from developing innovative policies to address their specific environmental and public health challenges.[1] The USEPA also issued a decision on March 14, 2022, that rescinded its 2019 withdrawal of California's authority to set its own vehicle standards.[2]

Construction Equipment Fuel Efficiency Standard

The USEPA sets emission standards for construction equipment. The first federal standards (Tier 1) were adopted in 1994 for all off-road engines over 50 horsepower and were phased in by 2000. A new standard was adopted in 1998 that introduced Tier 1 for all equipment below 50 horsepower and established the Tier 2 and Tier 3 standards The USEPA finalized a new emissions standard for automobiles and gasoline fuels in 2014 under Tier 3 which will be completely implemented in 2025. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements, which reduce nitrogen oxides (NO_x) and particulate matter (PM) emissions and are contained in 40 CFR Parts 1039, 1065, and 1068 (originally adopted in 69 Federal Register 38958 [June 29, 2004], and updated in 2014 [79 Federal Register 46356]). Emissions requirements for new off-road Tier 4 vehicles were phased in from 2008 to 2015. However, Tier 4 standards do not apply to existing off-road engines that were built before Tier 4 emission standards went into effect.

State

Assembly Bill 2076

Pursuant to Assembly Bill 2076, the California Energy Commission (CEC) and California Air Resources Board (CARB) prepared and adopted a joint-agency report in 2003, *Reducing California's Petroleum Dependence*. The report included recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030; significantly increase the efficiency of motor vehicles; and reduce per capita vehicle miles traveled. One of the performance-based goals of Assembly Bill 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 Integrated Energy Policy Reports (IEPR), the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

California Energy Commission Integrated Energy Policy Report

In 2002, the California State legislature adopted Senate Bill (SB) 1389, which requires the CEC to develop an IEPR every two years. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety.

The CEC adopted the 2023 IEPR on February 14, 2024. The 2023 IEPR provides the results of the CEC's assessments of a variety of energy issues facing California, many of which will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs. The 2023 IEPR discusses speeding connection of clean resources to the electricity grid, the potential use of clean and renewable hydrogen, and the California Energy Demand Forecast to 2040.

1 Federal Register, Vol. 86, No. 247, December 29, 2021.
2 Federal Register, Vol. 87, No. 49, March 14, 2022.

Renewables Portfolio Standards

First established in 2002 under SB 1078, California's Renewables Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent by 2020 and 50 percent by 2030. SB 350, signed on October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. The objectives of SB 350 are to (1) increase the procurement of electricity from renewable sources from 33 percent to 50 percent, and (2) double the energy savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation. On September 10, 2018, Governor Jerry Brown signed SB 100, which further increased California's RPS and requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, and states that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

The California Public Utilities Commission and the CEC jointly implement the RPS program. The responsibilities of the California Public Utilities Commission include:

1. Determining annual procurement targets and enforcing compliance;
2. Reviewing and approving each investor-owned utility's renewable energy procurement plan;
3. Reviewing contracts for RPS-eligible energy; and
4. Establishing the standard terms and conditions used in contracts for eligible renewable energy.

California's Energy Efficiency Standards for Residential and Nonresidential Buildings

In 1978, the CEC established Title 24, Part 6 of the California Code of Regulations, which are California's energy efficiency standards for residential and nonresidential buildings. Title 24, Part 6, also referred to as the California Energy Code, was codified in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and nonresidential buildings. California's energy efficiency standards are updated on an approximate three-year cycle. The 2022 California Energy Code became effective on January 1, 2023.

California Green Building Standards

The California Green Building Standards Code (Title 24, Part 11), commonly referred to as the CALGreen Code, is a Statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen Code requires new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design, energy efficiency, water efficiency and conservation. material conservation and resource efficiency, and environmental quality. The CALGreen Code also provides voluntary tiers and measures that local governments may adopt to encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2022 and became effective on January 1, 2023.

Local

City of Martinez Climate Action Plan

The City of Martinez Climate Action Plan (CAP) was adopted in June 2009. The CAP outlines specific strategies to reduce GHGs, conserve energy and other natural resources, and prepare the community for potential climate change impacts. These strategies include promoting public awareness; conserving energy in City facilities; community improvements, such as the of LED lights in traffic signals and tree lighting; partnerships with utility organizations; and grant applications. The CAP identifies four key sectors, including transportation, energy, solid waste, and water, that must be addressed to protect the community. To implement the CAP, the City prepares annual CAP Recap Reports, and the latest annual report was prepared in January 2025 for calendar year 2024.

City of Martinez General Plan

On November 2, 2022, the City Council adopted the General Plan 2035 (General Plan). The Open Space and Conservation Element includes goals, policies, and measures that could reduce energy use and improve energy efficiency in the City. The following goals and policies related to energy use are applicable to the proposed project:

- Goal OSC-G-6: Reduce energy, water, and resource consumption.
    - Policy OSC-P-6.1: Reduce energy, water, and resource consumption wherever possible as they pertain to buildings and construction.
    - Policy OSC-P-6.2: Promote and encourage compliance with sustainable building standards.
    - Policy OSC-P-6.4: Encourage existing buildings and new construction to incorporate renewable energy and energy- and water-efficient technologies.
- Goal OSC-G-7: Reduce energy use to limit air pollution and likelihood of power outages.

3.4.2 Environmental Setting

Energy use is typically quantified using British thermal units (Btu). A Btu is the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit (°F). The generating capacity of a unit of electricity is expressed in megawatts (MW). Electricity generation may be quantified in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh). Natural gas generation is expressed in therms, where one therm is equivalent to 100,000 Btu.

Statewide and Regional Energy Usage

California is one of the lowest per capita energy users in the United States due to its energy efficiency programs and mild climate. In 2021, California consumed 7,359 trillion Btu of energy with a total consumption per capita of 189 million Btu.

Electricity and Natural Gas

Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, and fireplaces, as well as industrial processes and alternative fuel vehicles.

Most of California's electricity is generated in-State, but California relies on out-of-state imports for nearly 90 percent of its natural gas supply. In 2023, approximately 23 percent of California's

electricity was imported from the Northwest and Southwest. Of the 281,140 GWh of total electricity consumed in California in 2023, 215,653 GWh was generated in-State.[3] Approximately 56 percent of the in-State generation was from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass.[4]

Petroleum

Petroleum fuels are primarily consumed by on-road and off-road equipment, and some industrial processes. Though California's population and economy are expected to grow, gasoline demand is forecasted to decline due to improvements in fuel efficiency and increased light-duty vehicle electrification.

California is one of the top producers of petroleum in the nation, with Statewide drilling operations concentrated primarily in Kern and Los Angeles Counties. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay Area, and the Central Valley. In 2019, the State supplied about 3 percent of the United States' total onshore and offshore production of crude oil. California oil refineries also process Alaskan and foreign crude oil received at ports in Los Angeles, Long Beach, and the San Francisco Bay Area. Crude oil production in California and Alaska is in decline, and California refineries depend increasingly on imports. Of the total amount of California's oil supply in 2022, 59 percent was supplied by imports, 26 percent by California, and 15 percent by Alaska.

In California, gasoline consumed primarily by light-duty cars, pickup trucks, and sport utility vehicles is the most used transportation fuel. Diesel, the second most-used transportation fuel, is primarily consumed by heavy-duty trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles. Both gasoline and diesel are primarily petroleum-based, and their consumption releases GHG emissions. The transportation sector is the single largest source of GHG emissions in the State and accounts for the largest share of the State's energy consumption. Nearly 40 percent of all inventoried GHG emissions in the State in 2022 were generated by the transportation sector.[5] The State's transportation sector accounts for approximately 84 percent of California's total petroleum consumption in 2022.[6] To reduce Statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline, which is sourced almost exclusively from in-State refineries.

Alternative Fuels

A variety of alternative fuels are used to reduce petroleum-based fuel demand. Conventional gasoline and diesel may be replaced by alternative fuels, such as hydrogen, biodiesel, and electricity, depending on the capability of the vehicle. Currently, there are 57 biodiesel refueling

[3] California Energy Commission, *2023 Total System Electric Generation*, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2023-total-system-electric-generation, accessed March 5, 2025.

[4] Ibid.

[5] California Air Resources Board, *Current California GHG Emission Inventory Data*, https://ww2.arb.ca.gov/ghg-inventory-data, accessed March 5, 2025.

[6] U.S. Energy Information Administration, *Table F16: Total Petroleum Consumption Estimates, 2022*, https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA, accessed March 5, 2025.

stations, 65 hydrogen refueling stations, and 152,356 electric vehicle (EV) charging stations (65,472 public EV chargers and 86,884 private EV chargers) across California.[7,8,9]

Local Energy Usage

Local Service Providers

Pacific Gas and Electric (PG&E) provides electricity and natural gas to the project site. PG&E is an independently owned utility that provides electricity to approximately 16 million customers throughout a 70,000-square-mile service area in northern and central California. PG&E electricity is generated by a combination of sources such as nuclear power plants and hydro-electric dams, as well as newer sources of energy, such as wind turbines and photovoltaic plants or "solar farms." The bulk electric grid, referred to as "the Grid," is a network of high-voltage transmission lines, linked to power plants within the PG&E system. The distribution system, made up of lower voltage secondary lines, is at the street and neighborhood level, and consists of overhead or underground distribution lines, transformers, and individual service drops[10] that connect to the individual customer.

PG&E gas transmission pipeline systems serve approximately 4.5 million gas customers in northern and central California. The system is operated under an inspection and monitoring program. The system operates in real time on a 24-hour basis, and includes leak inspections, surveys, and patrols of the pipelines. PG&E also adopted the Pipeline 2020 program, which aims to modernize critical pipeline infrastructure, expand the use of automatic or remotely operated shut-off valves, catalyze development of next-generation inspection technologies, develop industry-leading best practices, and enhance public safety partnerships with local communities, public officials, and first responders.

Electricity and Natural Gas

According to the City's CAP, GHG emissions associated with the consumption of electricity and natural gas accounted for more than 38 percent of the City's total GHG emissions inventory in 2005. Approximately half of the electricity and natural gas consumption was due to commercial buildings, while the other half was due to residential buildings.

3.4.3 Methodology

The analysis of impacts related to energy use considered the potential improvements on the project site. The estimated construction fuel consumption is based on the proposed project's construction equipment list, timing/phasing, and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips. Project construction would require temporary energy consumption primarily using fuel for construction equipment, construction worker vehicle trips to and from the project site, and the import and export of earth materials to and from the project site by heavy trucks. Energy consumption during construction, including gasoline and diesel fuel consumption from construction equipment, hauling trips, vendor trips,

7 United States Department of Energy, *Biodiesel Fueling Station Locations*, https://afdc.energy.gov/fuels/biodiesel_locations.html#/find/nearest?fuel=BD, accessed March 5, 2025.

8 California Energy Commission, *Hydrogen Refueling Station in California*, https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/hydrogen-refueling, accessed March 5, 2025.

9 California Energy Commission, *Electric Vehicle Chargers in California*, https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/electric-vehicle, accessed March 5, 2025.

10 A service drop is an overhead electrical line running from a utility pole to a customer's building or other premises.

and worker trips, was estimated using the assumptions and factors from CalEEMod. The results of the CalEEMod modeling are included in Appendix B.

The proposed facility improvements at the Martinez Terminal property would not require substantial additional operational electricity or natural gas consumption over the existing conditions. As such, operational energy usage is discussed qualitatively.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to energy are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to energy if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

California Environmental Quality Act Guidelines Appendix F

CEQA Guidelines Appendix F recommends the following topics that the lead agency may consider in the discussion of energy resources and conservation in an EIR, and in determining whether a project would result in the inefficient, wasteful, and unnecessary consumption of energy and whether the project would conflict with adopted energy conservation plans:

- Topic 1: The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- Topic 2: The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- Topic 3: The effects of the project on peak and base period demands for electricity and other forms of energy.
- Topic 4: The degree to which the project complies with existing energy standards.
- Topic 5: The effects of the project on energy resources.
- Topic 6: The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

3.4.4 Impact Analysis

ENE-1 Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

During construction, the proposed project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber. Fossil fuels used for construction vehicles and other energy-consuming

equipment would be used during pipeline relocation, demolition, site preparation, civil and mechanical construction, and electrical, fire system, and miscellaneous activities.

Table 3.4-1 shows the proposed project's anticipated annual energy consumption for the construction period in comparison with Contra Costa County's annual energy consumption.

Table 3.4-1: Project Construction and County Energy Consumption

Energy Type	Project Annual Energy Consumption	Contra Costa County Annual Energy Consumption	Percentage Increase Countywide
Fuel Consumption			
Construction Off-Road Fuel Consumption[a]	3,586 gallons	1,157,752 gallons	0.3097%
Construction On-Road Fuel Consumption[a]	37,875 gallons	6,802,021 gallons	0.5568%

Notes:

a. The project's construction and automotive fuel consumption is compared with the projected Countywide fuel consumption in 2025. Countywide fuel consumption is from the California Air Resources Board EMFAC2021 model.

Refer to Appendix B for assumptions used in this analysis.

As indicated in Table 3.4-1, the proposed project's annual average fuel consumption from off-road construction equipment use would be approximately 3,575 gallons, which would increase fuel use in the County by approximately 0.3 percent during the construction period. Also indicated in Table 3.4-1, the proposed project's annual average fuel consumption from on-road construction vehicle use would be approximately 37,804 gallons, which would increase fuel use in the County by approximately 0.6 percent during the construction period. As such, the energy use required for construction of the proposed project would have a nominal effect on the local and regional energy supplies, and would not be considered inefficient, wasteful, or unnecessary.

Further, construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Additionally, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13, Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, as discussed in Chapter 2, Project Description, some excavated soils would be reused as fill material to prepare the new track locations while the remainder would be placed within Martinez Terminal property. As such, construction of the proposed project would be consistent with applicable regulatory requirements, such as the 2022 CALGreen Code, which include construction waste management practices to divert a minimum of 65 percent of construction debris. Therefore, construction of the proposed project would not result in inefficient, wasteful, or unnecessary fuel consumption, and impacts would be less than significant.

Operation

As discussed, the proposed project would not affect existing rail traffic, as the cars would be added to one of the two existing local freight trains currently operating in the area. Therefore, the project would not add train trips compared to the existing conditions. The proposed project may

generate vehicle trips associated with the two additional employees required for project operations. However, operational fuel consumption from two employees' commute trips would be nominal. Additionally, the proposed new steam generator would modify the existing heating system at the facility using the same types and amounts of fuel, including natural gas and electricity, which are currently supplied by PG&E. The existing natural gas and electricity infrastructure would be extended from their current termini in the Martinez Terminal property in the western portion of the project site to connect to the railcars stored on the reestablished operating tracks. However, these connections would not expand the capacity of the natural gas and electricity infrastructure at the Martinez Terminal property. Furthermore, the proposed new steam generator would employ more efficient heating technology than the current heating system. As such, the amounts of these fuel sources would not significantly change from existing conditions. Therefore, operation of the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

ENE-2 Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The State and regional plans for renewable energy and energy efficiency that are applicable to the proposed project include the CEC's IEPR, Title 24 standards, and CALGreen standards. In addition, the City's General Plan and CAP are applicable plans that identify goals, policies, measures, and strategies to reduce energy consumption throughout the City. These standards and plans focus on the long-term operation of projects, including energy efficiency and on-road transportation. As the proposed project is a rail restoration project with minimal construction energy consumption and negligible operational energy consumption, energy conservation strategies from State, regional, and local plans do not apply to the proposed project. Therefore, the proposed project is not anticipated to conflict with or obstruct the State, regional, or local plan for renewable energy and energy efficiency, and impacts would be less than significant.

3.4.5 Mitigation Measures

No mitigation measures are required.

3.4.6 Level of Significance After Mitigation

Impacts related to energy would be less than significant.

3.4.7 Cumulative Impacts

Electricity and Natural Gas

The geographic context for the cumulative analysis of electricity and natural gas consumption is PG&E's service area. As discussed in the impact analysis above, the proposed project's electricity and natural gas demand during construction and operation would be nominal compared to the overall County's energy demand. As such, the proposed project would not significantly increase PG&E's total electricity and natural gas demand for its service population. Although future developments would result in the use of renewable and nonrenewable electricity and natural gas resources during construction and operation, which could limit future availability, the use of such resources would be on a relatively small scale given the size and type of use proposed by the related projects and would be reduced by measures being similarly implemented for the proposed project. Other future development projects and related projects would be expected to incorporate energy conservation features, comply with applicable regulations, such as the Title 24 standards, which include the CALGreen Code, and incorporate mitigation measures, as necessary. Furthermore, PG&E implements long-range planning methods that would account for regional

and local growth expectations for their respective service areas. As such, impacts associated with the proposed project would not be cumulatively considerable, and the proposed project's cumulative impacts related to the wasteful, inefficient, and unnecessary use of electricity and natural gas would be less than significant.

Consistency with Applicable Energy Regulations and Plans

As discussed above, the proposed project would not conflict with applicable regulations or plans as the proposed project would result in nominal fuel and energy consumption during construction and operation. Furthermore, the related projects within the project vicinity and future development projects would be required to comply with the Title 24 standards, CALGreen Code, and all applicable State, regional and local plans. As the related projects and future development would be required to meet the same energy consumption standards, there would be no significant cumulative impacts regarding consistency with applicable energy conservation plans. Therefore, the proposed project's contribution to cumulative impacts related to consistency with adopted energy conservation plans or state/local energy standards for renewable energy or energy efficiency would not be cumulatively considerable and, therefore, impacts would be less than significant.

3.5 GEOLOGY AND SOILS

This section evaluates the potential impacts to geology, soils, and paleontological resources that would result from implementation of the proposed project. This section is based, in part, on the *Geotechnical Investigation for the TransMontaigne Martinez Rail Track Expansion Waterfront Road, Martinez, California* (Geotechnical Investigation), prepared by GEOCON Consultants, Inc., dated December 2023, and provided as Appendix E.

3.5.1 Regulatory Setting

Federal

Earthquake Hazards Reduction Act of 1977

The Earthquake Hazards Reduction Act established the National Earthquake Hazards Reduction Program as a long-term earthquake risk reduction program for the United States. The act focuses on creating effective measures to reduce earthquake hazards; promoting the adoption of earthquake hazard reduction activities by federal, State, and local governments; improving the public's knowledge of earthquakes by increasing the overall understanding of the effects of earthquake on humans and their surroundings; and developing and maintaining systems for advancing these causes. The National Earthquake Hazards Reduction Program designates the Federal Emergency Management Agency (FEMA) as the Lead Agency of the program and assigns the agency with planning, coordinating, and reporting responsibilities.

Uniform Building Code

The Uniform Building Code (UBC) is published by the International Conference of Building Officials and forms the basis for California's Building Code (CBC), as well as approximately half of the State building codes in the United States. It has been adopted by the California Legislature to address the specific building conditions and structural requirements for California, as well as provide guidance on foundation design and structural engineering for different soil types. The UBC defines and ranks the regions of the United States according to their seismic hazard potential. There are four types of regions defined by Seismic Zones 1 through 4, with Zone 1 having the least seismic potential and Zone 4 having the highest.

Occupational Safety and Health Administration Regulations

The Occupational Safety and Health Administration (OSHA) Excavation and Trenching Standard covers requirements for excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

Paleontological Resources Preservation Act of 2002

The Paleontological Resources Preservation Act was enacted to codify the generally accepted practice of limiting the collection of vertebrate fossils and other rare and scientifically significant fossils to qualified researchers. These researchers must obtain a permit from the appropriate state or federal agency and agree to donate any materials recovered to recognized public institutions, where they will remain accessible to the public and to other researchers.

Paleontological resources are classified as nonrenewable scientific resources and are protected by federal and state statutes, most notably the 1906 federal Antiquities Act. Professional

standards for assessment and mitigation of adverse impacts on paleontological resources have been established by the Society for Vertebrate Paleontology.

Soil and Water Resources Conservation Act

The purpose of the Soil and Water Resources Conservation Act of 1977 is to protect or restore soil functions on a permanent sustainable basis. Protection and restoration activities include prevention of harmful soil changes, rehabilitation of the soil of contaminated sites and of water contaminated by such sites, and precautions against negative soil impacts. If the soil is impacted, disruptions of its natural functions and of its function as an archive of natural and cultural history should be avoided, as far as practicable.

State

California Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act addresses the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events. Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate “seismic hazard zones.” Cities and counties must regulate certain development projects within these zones until the geologic and soil conditions of their project sites have been investigated and appropriate mitigation measures, if any, have been incorporated into development plans. The State Mining and Geology Board provides additional regulations and policies to assist municipalities in preparing the safety element of their general plans and to encourage the adaptation of land use management policies and regulations to reduce and mitigate seismic hazards to protect public health and safety. Under Public Resources Code Section 2697, cities and counties must require, prior to the approval of a project located in a seismic hazard zone, submission of a geotechnical report defining and delineating any seismic hazards.

California Building Code

The California Building Code (CBC), codified in Title 24 of the California Code of Regulations, Part 2, was promulgated to safeguard public health, safety, and general welfare by establishing minimum standards related to structural strength, means of egress facilities, and general stability of buildings. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or those standards are not enforceable. The provisions of the CBC apply to the construction, alteration, movement, replacement, location, and demolition of every building, structure, or appurtenance connected or attached to such buildings or structures throughout California.

The 2022 edition of the CBC is based on the 2021 International Building Code published by the International Code Council. The code is updated triennially, and the 2022 edition of the CBC was published by the California Building Standards Commission on July 1, 2022, effective January 1, 2023. Every three years, the state adopts new codes (known collectively as the California Building Standards Code) to establish uniform standards for the construction and maintenance of buildings, electrical systems, plumbing systems, mechanical systems, and fire and life safety systems. Sections 17922, 17958, and 18941.5 of the California Health and Safety Code require that the latest edition of the California Building Standards Code apply to local construction 180 days after publication.

California Public Resources Code Section 5097.5

Paleontological resources are protected under a wide variety of Public Resources Code policies and regulations. In addition, paleontological resources are recognized as nonrenewable resources and receive protection under the Public Resources Code and CEQA. Public Resources Code Division 5, Chapter 1.7, Section 5097.5, and Division 20, Chapter 3, Section 30244 states:

> *No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.*

This statute prohibits the removal, without permission, of any paleontological site or feature from lands under the jurisdiction of the State or any city, county, district, authority, or public corporation, or any agency thereof. As a result, local agencies are required to comply with Public Resources Code Section 5097.5 for their own activities, including construction and maintenance, as well as for permit actions, such as encroachment permits, undertaken by others. Public Resources Code Section 5097.5 also establishes the removal of paleontological resources as a misdemeanor and requires reasonable mitigation of adverse impacts to paleontological resources from developments on public (State, county, city, and district) lands.

Local

Contra Costa County Hazard Mitigation Plan

The *Contra Costa County Hazard Mitigation Plan* (Hazard Mitigation Plan) was developed in accordance with the Disaster Mitigation Act of 2000 and followed FEMA's Local Hazard Mitigation Plan guidance. The Hazard Mitigation Plan incorporates a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which include both short and long-term strategies, involve planning, policy changes, programs, projects, and other activities. The plan covers the unincorporated county, 24 special districts, and 16 municipalities, including the City of Martinez. The latest adopted plan is the 2024 Contra Costa County Hazard Mitigation Plan.

City of Martinez General Plan

The City of Martinez General Plan (General Plan) identifies goals and policies related to geologic and seismic hazards in the Safety Element, and goals, policies, and measures related to paleontological resources in the Historic, Cultural, and Arts Element. Goals and policies relevant to the project include the following:

<u>Safety Element</u>

- Goal PS-G-1: Minimize the risks associated with seismic and subsidence activity.
    - Policy PS-P-1.1: Assure existing and proposed structures are designed to contemporary standards for seismic safety.
    - Policy PS-P-1.2: In areas with identified geotechnical hazards, development shall conform to the mitigation measures identified in a site-specific geotechnical report and/or the project and/or site shall be modified to respond to the site's hazards and conditions.

- Goal PS-G-2: Minimize risks of property damage and personal injury posed by geologic and seismic hazards.
    - Policy PS-P-2.1: Continue to use structural design criteria, codes, and other programs and policies to protect the public from seismic effects, such as liquefaction, seismic response of unconsolidated geologic formations, collapse-hazard buildings, and other seismic-induced failures of existing structures.
    - Policy PS-I-2.1a: Enforce requirements of the California Building Code, including seismic design provisions, as part of the building permit issuance and inspection process.
    - Policy PS-I-2.1b: Adopt updated versions of the California Building Code to address new technical and structural requirements that improve safety.
    - Policy PS-I-2.1c: Continue to utilize the latest reference material (hazard maps, data files, inventories, previous studies, etc.) to identify sites where additional study or mitigation measures are needed.
    - Policy PS-I-2.1d: Establish procedures and requirements when further studies are needed for a proposed development (geotechnical review procedures, flooding, potentially hazardous materials or soils, etc.).
    - Policy PS-I-2.1e: Incorporate recommendations and mitigation measures into site design and construction as part of project review/approval.
- Goal PS-G-3: Reduce risks associated with seismic and subsidence activity.
    - Policy PS-I-3.1c: In areas with identified geotechnical hazards, development shall conform to geotechnical report mitigation measures and/or project and site modifications to respond to site-specific hazards and conditions.
    - Policy PS-I-3.1f: Include site planning and building design features that reduce potential impacts from geologic hazards in the City's Design Guidelines, including provisions to limit damage to structures caused by subsidence and accepted grading practices on hillsides.
    - Policy PS-P-3.2: Study on a site-specific basis, the density, suitability, and selection of appropriate construction techniques in those areas where moderate soil limitations are present.
    - Policy PS-P-3.4: Support efforts by state and regional agencies to promote public awareness of potential geologic and seismic hazards.
    - Policy PS-P-3.5: New development and redevelopment projects with the potential for geological hazards, such as slope failures or soil subsidence, shall be subject to geotechnical evaluation prior to approval.

<u>Historic, Cultural, and Arts Element</u>

- Goal HCA-G-1: Promote and provide outreach for community and visitor appreciation for the history of Martinez.
    - Measure HCA-I-1.1h: Require all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources, archaeological resources, or human

remains:

a) If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the City shall be notified, and the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protections and preservation measures. Work may only resume when appropriate protections recommended by the qualified professional are in place and have been approved by the City.

City of Martinez Municipal Code

City of Martinez Municipal Code (Municipal Code) Title 15, *Buildings and Construction*, adopts various codes with modifications, including, but not limited to, the CBC, Residential Code, Green Building Standards Code, and Mechanical Code. Chapter 15.04, *Building Code*, adopts and provides amendments for the 2022 Edition of the CBC (Part 2 of Title 24 of the California Code of Regulations), which incorporates a California version of the 2021 International Building Code published by the International Code Council. Per Section 15.04.055, *Site Development Permit*, a site development permit is required for development of each parcel in the City for the plan checking and inspection of all non-building site improvements including grading. The site development permit serves as the City's grading permit. Section 15.04.060, *Erosion Control*, amends the CBC and contains the City's "Erosion Control Ordinance." The Erosion Control Ordinance requires erosion mitigation measures as part of the grading permit and sets minimum Erosion Control Standards and enforcement mechanisms.

3.5.2 Environmental Setting

Regional Geology and Seismicity

Geology

The City of Martinez is located within the Coast Ranges Geomorphic Province of California, which is characterized by a series of northwest-trending mountains and valleys along the north and central coast of California. Topography is controlled by the predominant geological structural trends within the Coast Range that generally consist of northwest-trending synclines, anticlines, and faulted blocks. The dominant structure is a result of both active northwest-trending, strike-slip faulting, associated with the San Andreas Fault Zone system, and east-west compression within the province.

Seismicity

The entire San Francisco Bay Area is located in a region of active seismicity. The seismicity of the region is primarily related to the San Andreas Fault Zone. The San Andreas Fault Zone is a complex of active faults forming a boundary between the North American and the Pacific lithosphere. Historically, numerous moderate to strong earthquakes have been generated in northern California by several major faults and fault zones in the San Andreas Fault Zone system. Active faults in the area include the Antioch, Calaveras, Concord, Franklin, Green Valley, Greenville, Hayward, Rodgers Creek, San Andreas, and Southampton faults. Three faults are of primary significance in the City. These include the Franklin Fault (thought to be a northern extension of the Calaveras Fault); the Concord-Green Valley Fault (which extends from south of Concord north to Lake County); and the Southampton Fault (which may also be a part of the active Calaveras Fault system in northern Contra Costa County). Seismic hazards within the City include the possibility of fault rupture and secondary damage from landslides, liquefaction, and

ground shaking. Many of the landslides within the City area are associated with the trend of the faults, especially the Franklin Fault. Faults have the potential to act as groundwater barriers, causing localized accumulation of groundwater. These zones of accumulated groundwater can cause slope stability problems.[1]

Project Site Geology and Seismicity

Geology

According to the Geotechnical Investigation, the project site is located within an area of Cretaceous-age Panoche Formation that trends northwest to southeast in the general vicinity of the Martinez Terminal property. Holocene-age Bay Mud is present on either side of the formational unit. The Bay Mud is mantled by artificial fills placed during previous episodes of site development east of the Waterfront Road overpass. Bay Mud is a notoriously weak and compressible young alluvial deposit typically comprising silts and clays with high organic content. Geologic conditions change dramatically over short horizontal distances within the vicinity, and the northwestern end of the project boundary is underlain by both Bay Mud and Panoche Formation.

A field exploration of the project site included eight soil borings drilled to depths ranging from approximately five to 39 feet, four Cone Penetrometer Tests (CPTs) advanced to depths of approximately 17 to 60 feet, and two hand auger borings excavated to depths of approximately two. Refer to Appendix E for locations and complete profiles of the borings and CPTs.

Artificial Fill

Borings to the west of the Waterfront Road overpass encountered artificial fills at depths of approximately one to six feet below ground surface (bgs). Fill materials consisted of loose sand and gravel, medium dense silty gravel and sand with various amounts of brick fragments, medium dense clayey sand with variable amounts of gravel, and stiff sandy clay with gravel. Borings to the east of the overpass encountered approximately six to seven feet of fill material determined to have been placed during prior development for the roadway and bridge. The fill materials were observed to generally consist of sandy clay with gravel, with concrete fragments. The measurements indicate that approximately five to 10 feet of artificial fill overlies the native Bay Mud on the east.

Bay Mud

To the west of the Waterfront Road overpass, Bay Mud deposits were encountered beneath a mantle of artificial fill. These Bay Mud deposits were observed as very soft to medium-stiff, lean-to-fat clay with organics, and extended to a depth of approximately 17.5 feet bgs. To the east of the overpass, Bay Mud deposits were also encountered beneath the existing artificial fill and extended to minimum depths of approximately 50 feet bgs. These deposits were observed as very soft-to-soft clay, typical of Bay Mud. It was determined that the Bay Mud is likely stiffer than the underlying materials within the unit and has formed a “Bay Mud crust.”

[1] City of Martinez, *General Plan 2035, Public Safety Element*, adopted November 2, 2022.

Alluvium

Alluvial soils consisting of stiff clays with sand were also encountered to the west of the Waterfront Road overpass and extended to depths of approximately 6 to 8 feet bgs.

Residual Soil

Residual soils were found in various locations atop underlying Panoche Formation (bedrock materials). The residual soils were encountered below existing fills (where present) and extended to depths of approximately 1.25 to 5.5 feet bgs. The residual soils were observed to be stiff to very stiff, lean-to-fat clay with variable amounts of sand and silt.

Panoche Formation

Panoche Formation was encountered beneath residual soils, beneath the Bay Mud or alluvial soils, and at-grade in the cuts below the Waterfront Road overpass. In addition, Panoche Formation was encountered beneath 6 to 7 feet of fill materials associated with bridge or roadway construction in the area. Panoche Formation is a Cretaceous-age marine formation with sandstone and claystone/shale subunits that are both mapped within the limits of the site. Panoche Formation materials provide good foundation support characteristics and are not considered susceptible to significant settlements.

Groundwater

Groundwater was not encountered in the field exploration borings. Testing at the site indicated that groundwater could occur at depths of approximately two to four feet. Actual groundwater levels fluctuate seasonally and with variations in rainfall, reservoir water level, temperature, and other factors and may be higher or lower than what was observed during the field exploration. It was concluded that shallow groundwater conditions are anticipated, especially within areas of Bay Mud.

Seismicity and Secondary Seismic Hazards

The proposed project is located within the seismically active northern California region, and like all locations within the area, is subject to strong seismic ground shaking.

Liquefaction

Liquefaction is the phenomenon in which loosely deposited granular soils located below the water table undergo rapid loss of shear strength due to excess pore pressure generation when subjected to strong earthquake-induced ground shaking. Ground shaking of sufficient duration results in the loss of grain-to-grain contact due to rapid rise in pore water pressure causing the soil to behave as a fluid for a short period of time. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

According to the California Geological Survey's Fault Activity Map of California and Earthquake Zones of Required Investigation, all or portions of the project site are located within a liquefaction zone.[2] Further, based on the composition of artificial fill encountered just below grade, and the v

[2] California Geological Survey, *Earthquake Zones of Required Investigation*, Map Viewer, https://maps.conservation.ca.gov/cgs/EQZApp/App/, accessed March 5, 2025.

aried subsurface conditions on-site which could result in differential settlement, there is potential for liquefaction to occur.

Landslides

Landslides are a geologic hazard, with some moving slowly and causing damage gradually, and others moving rapidly and causing unexpected damage. Gravity is the force driving landslide movement. Factors that commonly allow the force of gravity to overcome the resistance of earth material to landslide movement include saturation by water, steepening of slopes by erosion or construction, alternate freezing or thawing, and seismic shaking. The portion of the project site within the existing Martinez Terminal property is within a landslide zone; the portion of the project site within UPRR right-of-way is not within a landslide zone.[3]

Soil Erosion

Erosion is a process by which soil or earth material is loosened or dissolved and removed from its original location. Erosion can occur by varying processes and may occur at the project site where bare soil is exposed to wind or moving water, including both rainfall and surface runoff. The processes of erosion are generally a function of material type, terrain steepness, rainfall or irrigation levels, surface drainage conditions, and general land uses. Key factors to erosion, runoff, and sedimentation practices include the type of climate, topography, soil, and vegetation of the area. The project site could be subject to erosion, runoff, and sedimentation due to the loose, granular nature of the soils present at the project site.

Subsidence

Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. The greatest potential for subsidence occurs in the northern portion of the City, where modern sediments include soft, water saturated muds, peat and loose sands.[4] As the project site is located within the portion of the City containing these materials, there is potential for subsidence to occur.

Compressible/Collapsible Soils

Compressible soils are generally comprised of soils that undergo consolidation when exposed to new loading, such as fill or foundation loads. Soil collapse is a phenomenon where the soils undergo a significant decrease in volume upon increase in moisture content, with or without an increase in external loads. Soil collapse is generally associated with recently deposited, Holocene-age soils that have accumulated in an arid or semi- arid environment. Wind-deposited sands and silts, and alluvial fan and debris flow sediments deposited during flash floods represent soils that may be susceptible to collapse. Buildings, structures, and other improvements may be subject to excessive settlement-related distress when compressible soils or collapsible soils are present.

According to the Geotechnical Investigation, supportive Panoche Formation is present at-grade in the vicinity of the Waterfront Road overpass, but transitions to highly-compressible Bay Mud

[3] California Geological Survey, *Earthquake Zones of Required Investigation*, Map Viewer, https://maps.conservation.ca.gov/cgs/EQZApp/App/, accessed March 5, 2025.

[4] City of Martinez, Community Development Department, *Public Review Draft Environmental Impact Report for the Martinez General Plan Update*, August 2022.

over a short distance, east of the overpass. Additionally, Bay Mud was encountered in soil borings at the northwestern terminus of the project site. The proposed project would be constructed over both units and settlement could occur due to the compressibility of the Bay Mud.

Expansive Soils

Expansive soils include clay minerals that are characterized by their ability to undergo significant volume change (shrink or swell) due to variations in moisture content. Sandy soils are generally not expansive. Changes in soil moisture content can result from rainfall, irrigation, pipeline leakage, surface drainage, perched groundwater, drought, or other factors. Volumetric change of expansive soil may cause excessive cracking and heaving of structures with shallow foundations, concrete slabs-on-grade, or pavements supported on these materials. According to the Geotechnical Investigation, given the composition of on-site soils and the dramatic transitions of geologic conditions on site, there is potential for expansion to occur.

Paleontological Resources

A paleontological resource is a natural resource characterized as faunal or floral fossilized remains but may also include specimens of non-fossil material dating to any period preceding human occupation. These resources are valued for the information they yield about the history of the earth and its past ecological settings. The resources are found in geologic strata conducive to their preservation, typically sedimentary formations. Often, they appear as small outcroppings visible on the surface; other times they are below the ground surface and may be encountered during grading. In general, the City has a low-to-moderate potential to contain fossils.[5]

3.5.3 Methodology

Information, conclusions, and recommendations included in this assessment are based on the Geotechnical Investigation prepared for the proposed project, including information obtained from subsurface investigations at the project site, which was used to characterize geotechnical and geologic conditions at the project site, as well as the preparers' experience with similar soil and geologic conditions; refer to Appendix E. The analysis was also prepared based on a review of published references containing information on geologic, seismic, and historical conditions from sources such as the California Geological Survey, City of Martinez, and other sources, as referenced throughout this section.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to geology and soils are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to geology and soils if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction;
    - Landslides;

[5] City of Martinez, Community Development Department, *Public Review Draft Environmental Impact Report for the Martinez General Plan Update*, August 2022.

- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property; or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The Appendix G significance criteria noted below were scoped out of the analysis for further consideration in the Initial Study (Appendix A), and are discussed in Chapter 4, Other CEQA Considerations, of this Draft EIR.

- Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
- Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

3.5.4 Impact Analysis

GEO-1 Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Strong seismic ground shaking?

ii. Seismic-related ground failure, including liquefaction?

iii. Landslides?

The San Francisco Bay region is seismically active and as such, it is likely that the project site would experience seismic ground shaking within the foreseeable lifetime of the project. The type and magnitude of seismic hazards that may affect the project site are dependent on both the distance to causative faults and the intensity and duration of the seismic event. The Concord Valley Fault is the closest fault zone to the project site, located approximately one mile east of the project site.[6] As described in Section 3.5.2 above, portions of the project site are located in liquefaction and/or landslide zones. However, the project site is located within a portion of the City that is characterized by relatively level slopes with very low landslide potential.[7] According to the Geotechnical Investigation, geologic conditions change dramatically over short horizontal distances across the project site, and the northwestern end of the project boundary is underlain by both Bay Mud and Panoche Formation. The proposed project would be constructed over both units and significant differential settlement is likely to occur.

[6] California Geological Survey, *Earthquake Zones of Required Investigation* Data Viewer, available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed on March 5, 2025.

[7] City of Martinez, Community Development Department, *Public Review Draft Environmental Impact Report for the Martinez General Plan Update*, August 2022.

Project impacts concerning strong seismic ground shaking would be addressed through compliance with State and local seismic and geologic safety laws, standards, and guidelines, including the Seismic Hazard Mapping Act and the 2022 CBC. In general, the City regulates development (and reduces potential seismic and geologic impacts) through compliance with the 2022 CBC as adopted by the City pursuant to Municipal Code Chapter 15.04, Building Code, and project-specific design and construction recommendations. The CBC includes earthquake safety standards based on a variety of factors, including occupancy type, types of soils and rocks on-site, and strength of probable ground motion at the project site.

In compliance with the CBC, Municipal Code, and General Plan, a project-specific Geotechnical Investigation was prepared and provides preliminary geotechnical recommendations for design and construction (Appendix E). The Geotechnical Investigation includes recommended construction and design specifications that would reduce potential adverse effects from strong seismic shaking, including liquefaction and landslides. Specifically, Section 5, Conclusions and Recommendations, of the Geotechnical Investigation presents the project's seismic design parameters, which are intended to mitigate the effects of ground shaking produced by regional seismic events. As such, pursuant to Municipal Code Chapter 15.04, the project would be required to demonstrate that the seismic design parameters provided in Section 5, Conclusions and Recommendations, of the Geotechnical Investigation are incorporated into the project design and construction activities. In addition, the Geotechnical Investigation requires that all excavations during construction would be performed in accordance with project plans and specifications, as well as all OSHA requirements, to verify conditions are safe for workers.

As recommended by the Geotechnical Investigation, to reduce any impacts from liquefaction, the project would incorporate several construction measures, including specifications on fill placement and compaction and fill moisture content. As recommended by the Geotechnical Investigation, to reduce any impacts from landslides, the project would incorporate several design measures, including development of soil nail retaining walls and new embankment fills. The Geotechnical Investigation includes design recommendations for the walls and embankments, including pile depth, foundation types and depths, and allowable pressure. In addition, as discussed above, the project would be required to demonstrate that the Geotechnical Investigation's recommendations for design and construction are incorporated into the project design and construction plans pursuant to Municipal Code Chapter 15.04.

Compliance with applicable laws, standards, and guidelines, including the CBC, as adopted by reference in Municipal Code Chapter 15.04, the Public Safety Element, as well as compliance with the recommendations in the Geotechnical Investigation pursuant to Municipal Code Chapter 15.04, would ensure that the project would not expose people or structures to potential substantial adverse effects involving strong seismic ground shaking, landslides, or liquefaction. Impacts would be less than significant.

GEO-2 Would the project result in substantial soil erosion or the loss of topsoil?

Construction

According to the Geotechnical Investigation, artificial fill overlies the project site to a depth of approximately 10 feet, under which lies dramatic changes in Bay Mud and Panoche Formation. The artificial fill was placed during previous site development, and consists of loose sand and gravel, with silty and clayey qualities, and instances of brick and concrete fragments. There is artificial fill within the project site that may contain oversized materials.

As described in Section 2.5.2, Construction Scenario, site preparation activities would include excavation and grading of existing soil, and excavated soils would be used as fill material to prepare the site for placement of the tracks. Soils would then be compacted using graders, trucks, and compactors in preparation of installing the new track. Track construction would include grading, soil compaction and stabilization, placement of sub-ballast material, and installation of rail, ties, and ballast. In accordance with recommendations in the Geotechnical Investigation, all fill materials would be tested for recommended compaction and moisture content. Prior to the placement of fill materials for new embankments, the existing ground surface would also be stripped of vegetation and organic-laden topsoil and then scarified, moisture-conditioned as necessary, and recompacted.

Short-term erosion impacts associated with the construction of the proposed project would be minimized through required grading permits in accordance with Municipal Code Section 15.04.060. The proposed project would also develop and implement an Erosion Control Plan pursuant to Municipal Code Section 15.04.060. Additionally, as project construction would disturb more than one acre of soil, the project would be required to obtain coverage under the NPDES Construction General Permit. In accordance with the requirements of the NPDES Construction General Permit, and as set forth in Municipal Code Section 15.06.090.I, the implementation of a Storm Water Pollution Prevention Plan (SWPPP) would be required, which would identify associated Best Management Practices (BMPs), such as use of silt fences or straw wattles, drainage inlet protection, and temporary soil stabilization and water diversion to allow surface runoff to flow away from site improvements or areas susceptible to erosion. Proper surface drainage design and project site maintenance practices would reduce potential soil erosion following project construction. Implementation of the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from project-related grading and construction activities.

With adherence to existing permitting and municipal code regulatory requirements, including implementation of the Erosion Control Plan and SWPPP, and implementation of the recommendations of the Geotechnical Investigation in accordance with Municipal Code Chapter 15.04, construction impacts involving soil erosion and loss of topsoil would be less than significant.

Operation

The proposed project would reestablish the former rail line in areas previously containing such facilities within the existing Martinez Terminal property and within the UPRR ROW. Railroad tracks are underlain by pervious materials to maintain track support and proper drainage. Additionally, the ancillary improvements within the Martinez Terminal property, such as installation of new pipelines, pumps, and valves, would not result in an increase in impervious surfaces. As such, the proposed improvements would not increase the potential for erosion to occur at the project site. Therefore, implementation of the proposed improvements would result in less than significant impacts with regard to substantial soil erosion or the loss of topsoil during operation.

GEO-3 Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

As stated above, based on the Geotechnical Investigation, the project would be developed over both Panoche Formation and Bay Mud, resulting in differential settlement. The project site could be located on unstable or expansive soils that could result in landslides, lateral spreading, subsidence, liquefaction, or collapse.

Landslides and Liquefaction

As discussed under Threshold GEO-1, while portions of the project site are located in liquefaction and/or landslide zones, the project would be required to implement specific design recommendations provided in the Geotechnical Investigation to reduce impacts from landslides and strong seismic ground shaking, including liquefaction. In addition, project compliance with applicable laws, standards, and guidelines, including the CBC, as adopted by reference in Municipal Code Chapter 15.04, and the General Plan Public Safety Element, would reduce potential substantial adverse effects involving liquefaction or landslides. Impacts would be less than significant.

Lateral Spreading

Given that post-construction settlement may occur in areas underlain by Bay Mud, and as it is likely that groundwater may be encountered throughout the project site, the Geotechnical Investigation provides recommendations regarding earthwork construction as well as preliminary geotechnical design improvements. Such measures include sloping and shoring if necessary, grading during dry months, and drying of existing Bay Mud crust. Prior to placing fill materials, the existing ground surface would be stripped of vegetation and organic-laden topsoil, and scarified. If excavated Bay Mud is to be reused as fill, further review would be required and additional recommendations provided. All recommendations are pursuant to the CBC. Thus, with adherence to the Geotechnical Investigation recommendations in accordance with Municipal Code Chapter 15.04, impacts associated with lateral spreading would be less than significant.

Subsidence

The project site is located within an area of the City where sediments include soft, water-saturated muds and loose sands, which are potentially susceptible to oxidation and are associated with land subsidence. However, the project would be required to conform with the CBC and Municipal Code, as well as the General Plan policies requiring site planning and building design features that reduce potential impacts from geologic hazards in the City's Design Guidelines, including provisions to limit damage to structures caused by subsidence. With adherence to the policies and implementation measures in the General Plan, as well as applicable State and City codes, impacts associated with subsidence would be less than significant.

Collapsible/Compressible Soils

Bay Mud is a weak and compressible young alluvial deposit and is found throughout the project site. Conversely, Panoche Formation has very low compressibility. The Geotechnical Investigation recommends site drainage be maintained at all times and water not be allowed to pond; the proposed sump drainage system would ensure that excessive soil saturation would not occur. The Geotechnical Investigation also provides recommendations for excavation and soil preparation to reduce any potential impacts associated with collapsible soils. Thus, with implementation of project design recommendations in the Geotechnical Investigation, as required pursuant to Municipal Code Chapter 15.04, impacts associated with collapsible/compressible soils would be less than significant.

GEO-4 Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The project site is located within an area of high expansion potential.[8] Therefore, the Geotechnical Investigation recommends standard construction practices, such as proper foundation design and soil preparation, to reduce any potential impacts associated with expansive soils. Specifically, with the exception of ballast rock, import materials would possess "low" expansion potential (Expansion Index less than 50). With implementation of project construction practices and design recommendations of the Geotechnical Investigation, as required by Municipal Code Chapter 15.04, and adherence to the requirements of the CBC and the General Plan, impacts would be less than significant.

GEO-5 Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site has been previously disturbed and is developed with the Martinez Terminal property and UPRR tracks. Based on the Geotechnical Investigation, artificial fill material is present on-site to a depth of approximately seven feet bgs. The project is anticipated to disturb soils as deep as 16 feet bgs. The field borings that revealed Holocene-age Bay Mud extended to minimum depths of approximately 50 feet bgs. Sediments with Holocene components, such as those found at the project site, are known to typically produce fossils starting at approximately 24 feet bgs. Therefore, ground disturbing activities during construction of the proposed project would not be likely to alter any unique or significant geologic features. Therefore, the proposed project would not be anticipated to directly or indirectly destroy a unique paleontological resource or site or unique geological feature. In addition, although not expected to occur, in the event previously uncovered paleontological resources are encountered during project construction, the provisions of CEQA Guidelines Section 15064.5(f) would be followed, as well as General Plan Implementation Measure HCA-I-1.1h. Accordingly, all work within 100 feet of the discovery shall cease, the City shall be notified, and the resources shall be examined by a qualified paleontologist for appropriate protections and preservation measures. Work may only resume when appropriate protections recommended by the qualified professional are in place and have been approved by the City. Compliance with these existing policies would ensure that the impact to paleontological resources would be less than significant.

3.5.5 Mitigation Measures

No mitigation measures would be required.

3.5.6 Level of Significance After Mitigation

Impacts would be less than significant.

3.5.7 Cumulative Impacts

Due to the site-specific nature of geological conditions (e.g., soils, geological features, subsurface features, seismic features), geological impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis. As a result, whether a project would indirectly or directly cause substantial adverse effects, including risk of loss involving the rupture from a known earthquake fault, seismic ground shaking, liquefaction, or landslides, depends on the geotechnical conditions of the individual development site. The proposed project would be implemented in one

[8] City of Martinez, Community Development Department, *Public Review Draft Environmental Impact Report for the Martinez General Plan Update*, August 2022.

phase that would occur from the spring 2026 and take approximately 12 months to complete, concluding in spring 2027. Construction and operational activities occur within the existing footprint of the Martinez Terminal property and UPRR right-of-way. Therefore, the implementation of the project would not result in cumulatively considerable impacts to geology and soils.

If a related project occurs within the vicinity of the project site, that site may be located on a site with similar geological conditions. However, proposed development at any related project site would be required to be individually assessed for geologic conditions; further, site-specific recommendations would be identified for each individual project, as appropriate. Additionally, related projects would be required to comply with CBC regulations and may be required to comply with the Municipal Code, which mandate that structures be designed/constructed to meet seismic safety standards and to address any unsuitable soil conditions. Given these circumstances, the combined effects of the project and related projects would not result in cumulatively considerable impacts related to geology and soils. Therefore, cumulative impacts related to geology and soils would be less than significant.

With regard to potential cumulative impacts related to paleontological resources, the City is not known to be paleontologically significant.[9] Regardless, potential impacts to paleontological resources would be assessed as part of the environmental review process for each related project. Therefore, the project and related projects would not result in cumulatively considerable impacts to paleontological resources. The project's contribution to impacts to paleontological resources would not be cumulatively considerable, and cumulative impacts would be less than significant.

[9] City of Martinez, Community Development Department, *Public Review Draft Environmental Impact Report for the Martinez General Plan Update*, August 2022.

3.6 GREENHOUSE GAS EMISSIONS

This section evaluates the potential impacts related to the greenhouse gas (GHG) emissions associated with implementation of the proposed project. This section estimates the GHG emissions resulting from implementation of the proposed project and considers the project's consistency with applicable plans, policies, and regulations to reduce GHG emissions. This section is based in part on the Air Quality, Energy, and Greenhouse Gas Emissions Calculations included as Appendix B.

3.6.1 Regulatory Setting

Federal

Greenhouse Gas Endangerment Ruling

The U.S. Supreme Court in Massachusetts et al. v. Environmental Protection Agency et al. (549 U.S. 05-1120 [2007]) held that the U.S. Environmental Protection Agency (USEPA) has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act (CAA) and make a determination whether or not GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably endanger public health or welfare. In December 2009, the USEPA issued an endangerment finding for GHG emissions under the CAA, which set the stage for future regulations as the finding did not impose any emission reduction requirements. Accordingly, in response to the endangerment finding, the USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires facilities that emit 25,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) or more per year to submit an annual report.

Corporate Average Fuel Economy Standards

Established by the US Congress in 1975, the Corporate Average Fuel Economy (CAFE) Standards (49 Code of Federal Regulations [CFR] Parts 531 and 533) set fuel economy standards for all new passenger cars and light trucks sold in the United States. The Department of Transportation's National Highway Traffic Safety Administration and the USEPA jointly administer the CAFE standards, which become more stringent each year.

In August 2016, the USEPA and National Highway Traffic Safety Administration announced the adoption of phase two programs related to the fuel economy and GHG emissions standards for medium- and heavy-duty trucks. The phase two program applied to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards were expected to lower carbon dioxide (CO_2) emissions by approximately 1.1 billion metric tons of CO_2 ($MTCO_2$) and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program. The National Highway Traffic Safety Administration and the USEPA jointly published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program" (SAFE I Rule) in September 2019 and issued the Final SAFE Rule (i.e., SAFE Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks) in April 2020. The SAFE I Rule relaxed federal CAFE vehicle standards and revoked California's authority to set its own vehicle standards. On December 29, 2021, the National Highway Traffic Safety Administration issued the final rule to repeal the SAFE I Rule, effective January 28, 2022, which removes the improper restrictions placed on states and local governments from developing innovative policies to

address their specific environmental and public health challenges.[1] The USEPA also issued a decision on March 14, 2022, that rescinded its 2019 withdrawal of California's authority to set its own vehicle standards.[2]

State

Executive Order S-03-05

Executive Order S-03-05, signed by Governor Schwarzenegger in June 2005, set the following GHG reduction targets for the State:

- 2000 levels by 2010;
- 1990 levels by 2020; and
- 80 percent below 1990 levels by 2050.

Assembly Bill 1493

Assembly Bill (AB) 1493, also known as the Pavley Bill, requires that the California Air Resource Board (CARB) develop and adopt by January 1, 2005, regulations that achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the USEPA granted the waiver of CAA preemption to California for its GHG emissions standards for motor vehicles beginning with the 2009 model year. Pavley I regulated model years from 2009 to 2016, and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG," regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles, and Clean Fuels Outlet programs, which should provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels.

Assembly Bill 32 - California Global Warming Solutions Act of 2006

California's major initiative for reducing GHG emissions is outlined in AB 32, the California Global Warming Solutions Act of 2006, which was signed into law in 2006. AB 32 codifies the Statewide goal of reducing GHG emissions to 1990 levels by 2020 and required CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 required CARB to adopt regulations to require reporting and verification of Statewide GHG emissions. Based on this guidance, CARB approved a 1990 Statewide GHG level and 2020 limit of 427 $MMTCO_2e$. To implement AB 32, the first Climate Change Scoping Plan (Scoping Plan) was approved by CARB on December 11, 2008, and included measures to address GHG emissions reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG emissions reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade Program) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the 2008 Scoping Plan, which defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 Statewide goals. The update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan and evaluated how to align the State's longer-term GHG emissions reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use.

[1] Federal Register, Vol. 86, No. 247, December 29, 2021.
[2] Federal Register, Vol. 87, No. 49, March 14, 2022.

Senate Bill 32 - California Global Warming Solutions Act of 2016

Senate Bill (SB) 32, signed into law on September 8, 2016, extended AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remained unchanged). In December 2017, CARB adopted the 2017 Scoping Plan, which provided a framework for achieving the 2030 target. The 2017 Scoping Plan relied on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of then recently adopted policies, such as SB 350 and SB 1383. The 2017 Scoping Plan also put an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan, the 2017 Scoping Plan did not provide project-level thresholds for land use development. Instead, it recommended that local governments adopt policies and locally appropriate quantitative thresholds consistent with Statewide per capita goals of no more than 6 $MTCO_2e$ by 2030 and 2 $MTCO_2e$ by 2050.

Assembly Bill 1279

The California Climate Crisis Act, AB 1279 (enacted September 2022), establishes the target of: 1) achieving net zero GHG emissions as soon as possible, but no later than 2045, and 2) achieving and maintaining net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below 1990 levels. AB 1279 would require CARB to update the Scoping Plan and work with state agencies to identify and implement measures to achieve these policy goals which include solutions for CO_2 removal such as carbon capture, utilization, and storage technologies.

2022 Climate Change Scoping Plan

In response to the passage of AB 1279 and the identification of the 2045 GHG emissions reduction target, CARB adopted the 2022 Climate Change Scoping Plan (2022 Scoping Plan) in December 2022. The 2022 Scoping Plan builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying a new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Scoping Plan includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Scoping Plan assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan; addresses recent legislation and direction from Governor Newsom; extends and expands upon these earlier plans; and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Scoping Plan, "the plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the State's natural and working lands and using a variety of mechanical approaches." Specifically, the 2022 Scoping Plan achieves the following:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Scoping Plan includes emissions and carbon sequestration in natural and working lands and explores how they contribute to long-term climate goals. Under the Scoping Plan Scenario, California's 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. The Cap-and-Trade Program continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet these GHG emissions reduction goals and achieve carbon neutrality no later than 2045. The 2022 Scoping Plan approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

Senate Bill 375 - 2008 Sustainable Communities and Climate Protection Act

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the State's 18 major metropolitan planning organizations to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Metropolitan Transportation Commission (MTC) and Bay Area Governments (ABAG) metropolitan planning organization was assigned targets of a 7 percent reduction in GHGs from transportation sources by 2020 and a 15 percent reduction in GHGs from transportation sources by 2035.

Senate Bill 100 - California Renewables Portfolio Standard Program

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard (RPS) Program, which had been last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18 to Achieve Carbon Neutrality

On September 10, 2018, Governor Brown issued Executive Order B-55-18, which established a new Statewide goal of achieving carbon neutrality by 2045 and maintaining net negative

emissions thereafter. This goal is in addition to the existing Statewide GHG emissions reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

California Building Standards Code

California Code of Regulations Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, and accessibility for persons with physical and sensory disabilities. These standards are updated every three years. The most recent update, the 2022 California Building Standards, went into effect on January 1, 2023.

Part 11 – California Green Building Standards

Title 24, Part 11, is referred to as the California Green Building Standards (CALGreen) Code and was developed to help the State achieve its GHG emissions reduction goals under AB 32 by codifying standards for reducing building-related energy, water, and resource demand, which in turn reduces GHG emissions from energy, water, and resource demand. The CALGreen Code establishes mandatory measures, which include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality, for new residential and nonresidential buildings.

Regional

Plan Bay Area 2050

The MTC and ABAG jointly adopted the Plan Bay Area 2050 in October 2021. Plan Bay Area 2050 is forecasted to make significant progress in tackling the greatest challenges facing the region, from housing affordability to the intensifying impacts of global climate change. Plan Bay Area 2050 is comprised of 35 strategies, categorized under the elements of housing, the economy, transportation, and the environment. Plan Bay Area 2050 explores how the plan's strategies advance the region toward the adopted vision of a Bay Area that is affordable, connected, diverse, healthy and vibrant for all residents, with a strong focus on measuring equity outcomes. GHG emissions from transportation would decrease significantly as a result of the transportation and land use changes of the Plan Bay Area 2050, and if all strategies are implemented, the Bay Area would meet the State mandate of a 19 percent reduction in per capita GHG emissions by 2035.

Local

City of Martinez Climate Action Plan

The City of Martinez Climate Action Plan (CAP) was adopted in June 2009. The CAP outlines specific strategies to reduce GHGs, conserve energy and other natural resources, and prepare the community for potential climate change impacts. These strategies include promoting public awareness; conserving energy in City facilities; community improvements, such as the of LED lights in traffic signals and tree lighting; partnerships with utility organizations; and grant applications. The CAP identifies four key sectors –transportation, energy, solid waste, and water – that must be addressed to protect the community. To implement the CAP, the City prepares annual CAP Recap Reports, and the latest annual report was prepared in January 2025 for calendar year 2024.

City of Martinez General Plan

On November 2, 2022, the City Council adopted the General Plan 2035 (General Plan). The Noise and Air Quality Element includes goals, policies, and measures that could reduce GHG emissions in the City. The following goal and policies related to GHG emissions are applicable to the proposed project:

- Goal NA-G-9: Reduce greenhouse gas emissions to exceed or meet requirements of AB 32 and SB 375.
    - Policy NA-P-9.1: Continue to maintain and improve a Climate Action Plan that will outline strategies to achieve the City's goal to reduce greenhouse gas emissions.
    - Policy NA-P-9.2: Consider adoption of an ordinance to phase out natural gas hook-ups in new building construction.

3.6.2 Environmental Setting

Global Climate Change

Climate change is the observed increase in the average temperature of Earth's atmosphere and oceans over an extended period. The term "climate change" is often used interchangeably with "global warming," but climate change is preferred because it conveys changes are happening in addition to rising temperatures (such as changing wind patterns, precipitation, and storms). The baseline against which these changes are measured originates from historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling, typically at an incremental rate over the course of thousands of years. However, scientists have observed acceleration in the rate of warming over the past 150 years.

The United Nations' Intergovernmental Panel on Climate Change (IPCC) expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities, which has led the climate to warm at an unprecedented rate in the last 2,000 years. Since the late 1700s, estimated concentrations of CO_2, methane (CH_4), and nitrous oxide (N_2O) in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity. Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature.

Greenhouse Gases

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. GHGs are emitted by natural processes and human activities. The gases that are widely seen as the principal contributors to human-induced climate change include CO_2, CH_4, N_2O, fluorinated gases, such as hydrofluorocarbons and perfluorocarbons, and sulfur hexafluoride (SF_6). Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. CO_2 emissions are usually by-products of fossil fuel combustion, and CH_4 emissions result from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6. Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a timescale of generally 100

years. Because GHGs absorb different amounts of heat, CO_2 is used as a common reference gas to relate the amount of heat absorbed to the amount of the gas emitted. This relationship is referred to as a "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. CO_2 has a 100-year GWP of one. By contrast, CH_4 has a GWP of 28, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis.

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler. GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

Climate Change Impacts

Globally, climate change can affect environmental resources through impacts related to future temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. Due to past and current activities, anthropogenic GHG emissions are increasing the global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades.

Climate Change in California

Greenhouse Gases

Based on the CARB California Greenhouse Gas Inventory for 2000-2021, California produced 381.3 million metric tons of CO_2e ($MMTCO_2e$) in 2021, which is 12.6 $MMTCO_2e$ higher than 2020 levels.[3] The decrease in emissions during 2020 is likely due to the COVID-19 pandemic. The major source of GHG emissions in California is the transportation sector, which comprises 38.2 percent of the State's total GHG emissions. The industrial sector is the second largest source, comprising 19.4 percent of the State's GHG emissions, while electric power accounts for approximately 16.4 percent. The magnitude of California's total GHG emissions is due in part to its large size and population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emissions reduction target of reducing emissions to 1990 levels as emissions fell below 431 $MMTCO_2e$. The annual 2030 Statewide target emissions level is 260 $MMTCO_2e$.

Climate Change Impacts

Potential impacts of climate change in California may include loss in water supply from reduced snowpack; sea level rise; and an increase in extreme heat days per year, large forest fires, and drought years. Below is a summary of some of the potential effects that could be experienced in California due to climate change.

[3] California Air Resource Board, California Greenhouse Gas Emissions from 2001 to 2021: Trends of Emissions and Other Indicators, December 14, 2023.

Air Quality

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century. Higher temperatures are conducive to air pollution formation, and rising temperatures could lead to worsened air quality in California. As temperatures have increased in recent years, the area burned by wildfires throughout the State has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks.

Water Supply

The average early spring snowpack in the western United States, including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. The Sierra snowpack provides most of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack. Year-to-year variability in Statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common. The overall impact of climate change on future precipitation trends and water supplies in California is uncertain, although projections indicate that the average spring snowpack in the Sierra Nevada and other mountain catchments in Central and Northern California will decline by approximately 66 percent from its historical average by 2050.

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding and induce substantial sea level rise in the coming century. The rate of increase of global mean sea levels between 1993 to 2020, observed by satellites, is approximately 3.3 millimeters (mm) per year, double the 20th century trend of 1.6 mm per year. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure. Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California's agricultural industry produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts. Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks. Temperature increases could also change the time of year that certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality.

Ecosystems and Wildlife

The annual average maximum daily temperatures in California could rise by 4.4 to 5.8 degrees Fahrenheit (°F) in the next 50 years and by 5.6 to 8.8°F in the next century. Rising temperatures resulting from climate change could have four major impacts on plants and animals related to (1)

timing of ecological events; (2) geographic distribution and range; (3) species' composition and the incidence of non-native species within communities; and (4) ecosystem processes, such as carbon cycling and storage. Increases in wildfire would further remove sensitive habitat, increased severity in droughts would potentially starve plants and animals of water, and sea level rise would affect sensitive coastal ecosystems.

City of Martinez Greenhouse Gas Emissions Inventory

In 2005, the City conducted an inventory of City-wide GHG emissions for calendar year 2005. The inventory showed that City residents, businesses, and government emitted approximately 321,000 $MTCO_2e$ in 2005. The largest category emitting GHG emissions was transportation, (specifically, truck and automobile emissions), which accounted for nearly half of the total emission inventory. Other major sources included residential and commercial electricity and natural gas use, and emissions related to solid waste collection and disposal.

3.6.3 Methodology

The baseline against which potential impacts of the proposed project are compared includes the natural and anthropogenic drivers of global climate change, including worldwide GHG emissions from human activities that have increased by about 90 percent since 1970.[4] As a result, the study area for climate change and the analysis of GHG emissions is broad. However, the study area is also limited by CEQA Guidelines Section 15064.4(b), which directs lead agencies to consider an "indirect physical change" only if that change is a reasonably foreseeable impact, which may be caused by the project.

CEQA Guidelines Section 15064.4 recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions, whether a project exceeds an applicable significance threshold, and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions.

However, CEQA Guidelines Section 15064.4 does not establish a threshold of significance. CEQA Guidelines Section 15064.6 provides lead agencies the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies or suggested by other experts, if any threshold chosen is supported by substantial evidence. The City of Martinez has adopted a CAP; however, the CAP does not contain a numerical significance threshold for assessing impacts related to GHG emissions. Similarly, the Bay Area Air Quality Management District (BAAQMD), the Governor's Office of Land Use and Climate Innovation (formerly Planning and Research), CARB, California Air Pollution Control Officers Association (CAPCOA), or any other State or applicable regional agency has yet to adopt a numerical significance threshold for assessing GHG emissions that is applicable to the proposed project.

Impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources, and, therefore, a numerical significance threshold for individual development projects is speculative. Throughout the State, air districts are moving from numerical significance thresholds to qualitative significance thresholds that focus on project features to reduce GHG emissions or consistency with GHG reduction plans. According to the BAAQMD 2022 CEQA

[4] USEPA, Global Greenhouse Gas Emissions Data, available at: https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data, accessed April 17, 2024.

Guidelines, the GHG thresholds of significance are either whether land use projects include certain project design elements related to buildings and transportation or whether the project is consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b). This is a major update to BAAQMD's 2017 CEQA Guidelines, where a numerical significance threshold was required. To reduce the GHG emissions impact, it is more effective for development projects to include project features that directly or indirectly reduce GHG emissions, rather than relying on a numerical significance threshold, which highly depends on the type and size of the development. It should be noted that the BAAQMD provides a numerical significance threshold for land use development projects and stationary source projects. However, as the proposed project is neither a land use development nor a stationary source project, this threshold would not apply.

Therefore, the significance of the project's potential impacts regarding GHG emissions and climate change are assessed solely on its consistency with plans and policies adopted for the purposes of reducing GHG emissions and mitigating the effects of climate change and the project's ability to incorporate sustainable features and strategies in its design to reduce GHG emissions. The analysis has also quantified the project's GHG emissions for informational purposes. The methodology for quantifying the project's GHG emissions is similar to the methodology used in Section 3.1, Air Quality, of this Draft EIR.

It should be noted that individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. As a result, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. According to CEQA Guidelines Section 15064(h)(1), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem in the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans, and plans or regulations for the reduction of GHG emissions. Therefore, a lead agency can make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies, and/or other regulatory strategies to reduce GHG emissions.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to greenhouse gases are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to greenhouse gas emissions if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

3.6.4 Impact Analysis

GHG-1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction

The proposed project would involve construction activities such as excavation, grading, soil compaction, placement of sub-track materials, installation of railroad tracks, construction of retaining walls, and installation of other ancillary facilities, including piping and pump connections. Construction of the proposed project would generate temporary GHG emissions primarily from construction equipment, construction worker trips to and from the project site, and heavy trucks to transport construction materials. Construction GHG emissions are typically summed and amortized over the lifetime of a project (conservatively assumed to be 30 years) and then added to the operational emissions.

The proposed project would be constructed over approximately 12 months, beginning in spring 2026. Table 3.6-1 summarizes the total GHG emissions during construction and the amortized GHG emissions. As shown below, the construction of the proposed project would result in approximately 542.5 $MTCO_2e$ of GHG emissions. Amortized over a 30-year period, the proposed project would generate 18.08 $MTCO_2e$ per year of GHG emissions.

Table 3.6-1: Construction Greenhouse Gas Emissions ($MTCO_2e$)

Construction Year	CO_2	CH_4	N_2O	Refrigerants	Total $MTCO_2e$
Year 1	468	0.02	<0.01	0.05	470
Year 2	72.3	<0.01	<0.01	0.01	72.5
Total	540.3	0.02	<0.01	0.06	542.5
Amortized Over 30 Years	**18.01**	**<0.01**	**<0.01**	**<0.01**	**18.08**

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Refer to Appendix B.

Operation

The proposed project would not affect existing rail traffic, as the cars would be added to one of the two existing local freight trains currently operating in the area. Therefore, the proposed project would not add train trips compared to the existing conditions. The proposed project may generate vehicle trips associated with the two additional employees required for project operations. However, emissions from two employees' commute trips would be nominal. Additionally, the proposed new steam generator would modify the existing heating system at the facility using the same types and amounts of fuel, including natural gas and electricity, which are currently supplied by PG&E. The existing natural gas and electricity infrastructure would be extended from their current termini in the Martinez Terminal property in the western portion of the project site to connect to the railcars stored on the reestablished operating tracks. These connections would not expand the capacity of the natural gas and electricity infrastructure at the Martinez Terminal property and emissions from combustion of these fuels would not significantly change from existing conditions. Furthermore, the proposed new steam generator would employ more efficient heating technology than the current heating system. As such, the proposed project would generate nominal operational GHG emissions compared to existing conditions.

As demonstrated in the analysis of Impact GHG-2 below, the proposed project would be consistent with the 2022 Scoping Plan, Plan Bay Area 2050, the City's General Plan, and the

City's CAP. As the proposed project is consistent with these GHG reduction plans, the proposed project would also be consistent with the State's long-term goal to achieve statewide carbon neutrality (zero-net emissions). Accordingly, impacts related to GHG emissions resulting from the proposed project would be less than significant.

GHG-2 Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The applicable plans related to reducing greenhouse gas emissions for the proposed project include CARB's 2022 Scoping Plan, ABAG's Plan Bay Area 2050, the City's General Plan, and the City's CAP. CARB's 2022 Scoping Plan identifies reduction measures necessary to achieve the goal of carbon neutrality by 2045 or earlier. ABAG's Plan Bay Area 2050 includes strategies to advance the region toward the adopted vision of a Bay Area that is affordable, connected, diverse, healthy, and vibrant for all residents, with a strong focus on measuring equity outcomes. The City's General Plan and CAP identify goals, policies, measures, and strategies to reduce GHG emissions throughout the City. These plans focus on the long-term operation of projects, including energy efficiency, on-road transportation, water consumption, and waste generation.

As the proposed project is a rail restoration project with minimal construction GHG emissions and negligible operational emissions, GHG emission reduction strategies from State, regional, and local plans do not apply to the project. In addition, the project design elements required by the BAAQMD CEQA Guidelines are for land use development projects, which do not apply to the proposed project. Therefore, the proposed project is not anticipated to conflict with or obstruct the State, regional, or local plan for GHG emissions reductions. Specifically, as shown in Table 3.6-1, project-related GHG emissions would result in a total of approximately 18.03 $MTCO_2e$ per year, which would be considered a nominal amount compared to land use development projects. Therefore, the proposed project would not have the potential to conflict with the 2022 Scoping Plan, Plan Bay Area 2050, the City's General Plan, the City's CAP, or any other applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs. Impacts would be less than significant.

3.6.5 Mitigation Measures

No mitigation measures are required.

3.6.6 Level of Significance After Mitigation

Impacts related to GHG emissions would be less than significant.

3.6.7 Cumulative Impacts

The geographic scope for the cumulative impact analysis for GHG emissions is global because impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. Therefore, GHG emissions and climate change are, by definition, cumulative impacts. As discussed in Section 3.6.2, Environmental Setting, adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. As discussed above, the proposed project would not conflict with applicable regulations or plans as the proposed project would generate nominal GHG emissions during construction and operation. Therefore, the proposed project's contribution to impacts related to GHG emissions and climate change would not be cumulatively considerable, and, as such, cumulative impacts would be less than significant.

3.7 HAZARDS AND HAZARDOUS MATERIALS

This section analyzes the project's potential impacts related to hazards and hazardous materials that could occur during the construction and operation of the proposed project, and identifies the ways that hazardous materials and other types of hazards could expose people and the environment to various health and safety risks during project implementation. The analysis is based, in part, on the Phase I Environmental Site Assessment (Phase I ESA) and the Soil Sampling Report prepared for the project by ENGEO Incorporated, dated October 2023 and May 2024, respectively. These reports are included as Appendix F.

3.7.1 Regulatory Setting

Federal

Resource Conservation and Recovery Act of 1976

The federal Resource Conservation and Recovery Act (RCRA) (42 United States Code [USC] secs. 6901–6992k), which amended and revised the Solid Waste Disposal Act, regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. Under RCRA regulations, generators of hazardous waste must register and obtain a hazardous waste activity identification number. RCRA allows individual states to develop their own programs for the regulation of hazardous waste as long as they are at least as stringent as RCRA's.

Underground Storage Tanks (USTs) are regulated under Subtitle I of RCRA and its regulations, which establish construction standards for UST installations installed after December 22, 1988, as well as standards for upgrading existing USTs and associated piping. Since 1998, all non-conforming tanks were required to be either upgraded or closed.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, providing for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled the revision of the National Contingency Plan. The National Contingency Plan provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also establishes the National Priorities List, which is a list of contaminated sites warranting further investigation by the EPA. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act of 1970, which is implemented by the federal Occupational Safety and Health Administration (OSHA), contains provisions with respect to hazardous materials handling. OSHA was created to assure safe and healthful working conditions by setting and enforcing standards and by providing training, outreach, education, and assistance. OSHA provides standards for general industry and construction industry on hazardous waste operations and emergency response. OSHA requirements, as set forth in 29 Code of Federal Regulations (CFR) Section 1910, et. seq., are designed to promote worker safety, worker training, and a worker's right–to-know. The U.S. Department of Labor has delegated the authority to

administer OSHA regulations to the State of California. The California OSHA program (Cal/OSHA) (codified in the California Code of Regulations [CCR], Title 8, or 8 CCR generally and in the Labor Code secs. 6300– 6719) is administered and enforced by the Division of Occupational Safety and Health. Cal/OSHA is very similar to the OSHA program. Among other provisions, Cal/OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program for potential workplace hazards, including those associated with hazardous materials.

In addition, pursuant to OSHA, a developer that undertakes a construction project that involves the handling of contaminated site conditions must prepare and implement a Health and Safety Plan (HASP) that sets forth the measures that would be undertaken to protect those that may be affected by the construction project. While a HASP is prepared and implemented pursuant to OSHA, the HASP is not subject to regulatory review and approval. It should be noted, though, that a HASP is typically appended to a Soil Management Plan if required by the Certified Unified Program Agency (CUPA). The HASP, if required, would be prepared in accordance with the most current OSHA regulations, including 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response and 29 CFR 1926, Construction Industry Standards, as well as other applicable federal, State, and local laws and regulations.

Toxic Substances Control Act

In 1976, the federal Toxic Substances Control Act (TSCA) (15 USC Sections 2601–2671) established a system of evaluation in order to identify chemicals which may pose hazards. TSCA is enforced by the United States Environmental Protection Agency (USEPA) through inspections of places in which asbestos-containing materials (ACMs) are manufactured, processed, and stored and through the assessment of administrative and civil penalties and fines, as well as injunctions against violators. TSCA establishes a process by which public exposure to hazards may be reduced through manufacturing, distribution, use and disposal restrictions or labeling of products. Polychlorinated Biphenyls (PCBs) are hazardous materials regulated by the USEPA under TSCA. These regulations ban the manufacture of PCBs, although the continued use of existing PCB-containing equipment is allowed. PCBs were formerly used in such applications as hydraulic fluids, plasticizers, adhesives, fire retardants, and electrical transformers, among others. TSCA also contains provisions controlling the continued use and disposal of existing PCB-containing equipment. The disposal of PCB wastes is also regulated by TSCA (40 CFR 761), which contains life cycle provisions similar to those in RCRA. In addition to TSCA, provisions relating to PCBs are contained in the Hazardous Waste Control Law, which lists PCBs as hazardous waste.

Under the TSCA, the USEPA has enacted strict requirements on the use, handling, and disposal of ACMs. These regulations include the phasing out of friable asbestos and ACMs in new construction materials beginning in 1979. In 1989, the USEPA banned most uses of asbestos in the country. Although most of the ban was overturned in 1991, the current banned product categories include corrugated paper, rollboard, commercial paper, specialty paper, flooring felt, and any new uses. The TSCA also establishes USEPA's Lead Abatement Program regulations, which provide a framework for lead abatement, risk assessment, and inspections. Those performing these services are required to be trained and certified by USEPA.

Hazardous Materials Transportation Act

The U.S. Department of Transportation (USDOT) prescribes strict regulations for the safe transportation of hazardous materials, including requirements for hazardous waste containers and licensed haulers who transport hazardous waste on public roads. The Secretary of the Department of Transportation receives the authority to regulate the transportation of hazardous

materials from the Hazardous Materials Transportation Act, as amended and codified in 49 USC Section 5101 et seq. The Secretary of Transportation is authorized to issue regulations to implement the requirements of 49 USC. The Pipeline and Hazardous Materials Safety Administration, 8 formerly the Research and Special Provisions Administration, was delegated the responsibility to write the hazardous materials regulations, which are contained in Title 49 of the CFR Parts 100–180. Title 49 of the CFR, which contains the regulations set forth by the Hazardous Materials Transportation Act, specifies requirements and regulations with respect to the transport of hazardous materials. It requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Under the Hazardous Materials Transportation Act, the Secretary of Transportation "may authorize any officer, employee, or agent to enter upon, inspect, and examine, at reasonable times and in a reasonable manner, the records and properties of persons to the extent such records and properties relate to: (1) the manufacture, fabrication, marking, maintenance, reconditioning, repair, testing, or distribution of packages or containers for use by any "person" in the transportation of hazardous materials in commerce; or (2) the transportation or shipment by any "person" of hazardous materials in commerce."

Research and Special Programs Administration

The Research and Special Programs Administration regulations cover definition and classification of hazardous materials, communication of hazards to workers and the public, packaging and labeling requirements, operational rules for shippers, and training. They apply to interstate, intrastate, and foreign commerce by air, rail, ships, and motor vehicles, and also cover hazardous waste shipments. The Research and Special Programs Administration's Federal Highway Administration is responsible for highway routing of hazardous materials and highway safety permits. The U.S. Coast Guard regulates bulk transport by vessel. The hazardous material regulations include emergency response provisions, including incident reporting requirements. Reports of major incidents go to the National Response Center, which in turn is linked with CHEMTREC, a service of the chemical manufacturing industry that provides details on most chemicals shipped in the United States.

Federal Emergency Management Act

Federal Emergency Management Act (FEMA) was established in 1979 via executive order and is an independent agency of the federal government. In March 2003, FEMA became part of the U.S. Department of Homeland Security with the mission to lead the effort in preparing the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration.

Disaster Mitigation Act of 2000

Disaster Mitigation Act (42 USC Section 5121) provides the legal basis for FEMA mitigation planning requirements for State, local, and Indian Tribal governments as a condition of mitigation grant assistance. It amends the Robert T. Stafford Disaster Relief Act of 1988 (42 USC Sections 5121-5207) by repealing the previous mitigation planning provisions and replacing them with a new set of requirements that emphasize the need and creates incentives for state, Tribal, and local agencies to closely coordinate mitigation planning and implementation efforts. This Act reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and the streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of this Act include:

- Funding pre-disaster mitigation activities;
- Developing experimental multi-hazard maps to better understand risk;
- Establishing state and local government infrastructure mitigation planning requirements;
- Defining how states can assume more responsibility in managing the Hazard Mitigation Grant Program (HMGP); and
- Adjusting ways in which management costs for projects are funded.

State

California Department of Toxic Substances Control

Authority for the statewide administration and enforcement of RCRA rests with the California Environmental Protection Agency's (CalEPA) Department of Toxic Substances Control (DTSC). While DTSC has primary state responsibility in regulating the generation, storage and disposal of hazardous materials, DTSC may further delegate enforcement authority to local jurisdictions. In addition, DTSC is responsible and/or provides oversight for contamination cleanup and administers statewide hazardous waste reduction programs. DTSC operates programs to accomplish the following: (1) manage the aftermath of improper hazardous waste management by overseeing site cleanups; (2) prevent releases of hazardous waste by ensuring that those who generate, handle, transport, store, and dispose of wastes do so properly; and (3) evaluate soil, water, and air samples taken at sites.

California Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires preparation of Hazardous Materials Business Plans and disclosure of hazardous materials inventories, including an inventory of hazardous materials handled, plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures for businesses that handle, store, or transport hazardous materials in amounts exceeding specified minimums (California Health and Safety Code [HSC], Division 20, Chapter 6.95, Article 1). Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the state. Local agencies are responsible for administering these regulations.

Businesses with reportable quantities of hazardous materials must submit a hazardous materials business plan on or before March 1st every year. A reportable quantity is equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, 200 cubic feet of gas, or an extremely hazardous substance at or above the chemical specific reportable quantity (40 CFR, Part 355, Appendix A). A hazardous materials business plan consists of Business Activities, Business Owner/Operator Identification, Hazardous Materials Inventory, Site Map, Emergency Response/Contingency Plan, and Employee Training Plan. Each hazardous material and/or hazardous waste in a reportable quantity must be included in the inventory, and the plan's six elements must be submitted in the California Environmental Reporting System (CERS).

Hazardous Waste and Substance Sites

Government Code Section 65962.5, amended in 1992, requires the CalEPA to develop and update annually the Hazardous Waste and Substances Sites (Cortese List), which is a list of hazardous waste sites and other contaminated sites. The Cortese List is a planning document used by the State, local agencies, and developers to comply with California Environmental Quality

Act (CEQA) requirements pertaining to providing information about the location of hazardous materials release sites. While the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

1. List of Hazardous Waste and Substances sites from the DTSC Envirostor database (HSC Sections 25220, 25242, 25356, and 116395);
2. List of open and active leaking underground storage tank (LUST) Sites by County and Fiscal Year from the SWRCB GeoTracker database (HSC Section 25295);
3. List of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit (Water Code Section 13273[e] and 14 CCR Section 18051);
4. List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from the SWRCB (California Water Code Sections 13301 and 13304); and
5. List of hazardous waste facilities subject to corrective action pursuant to HSC Section 25187.5, identified by the DTSC.

Hazardous Waste Control Law

The Hazardous Waste Control Law empowers DTSC to administer the state's hazardous waste program and implement the federal program in California. CCR Titles 22 and 23 address hazardous materials and wastes. Title 22 defines, categorizes, and lists hazardous materials and wastes. Title 23 addresses public health and safety issues related to hazardous materials and wastes and specifies disposal options.

License to Transport Hazardous Materials—California Vehicle Code, Section 32000.5 et seq.

Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including CalEPA and the California Emergency Management Agency. The California Highway Patrol and the California Department of Transportation enforce regulations specifically related to the transport of hazardous materials. Together, these agencies determine container types/specifications used and license hazardous waste haulers for hazardous waste transportation on public roadways.

Underground Storage Tanks Program

The State regulates USTs through a program pursuant to HSC, Division 20, Chapter 6.7, and CCR Title 23, Division 3, Chapter 16 and Chapter 18. The State's UST program regulations include among others, permitting USTs, installation of leak detection systems and/or monitoring of USTs for leakage, UST closure requirements, release reporting/corrective action, and enforcement. Oversight of the statewide UST program is assigned to the SWRCB which has delegated authority to the RWQCB and typically on the local level, to the fire department. The Contra Costa Health Services Hazardous Materials Programs administers and enforces federal and state laws and local ordinances for USTs at the Project Site. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by agency inspectors. If a release affecting groundwater is documented, the project file is transferred to the appropriate RWQCB for oversight.

Aboveground Petroleum Storage Act

In 1989, California established the Aboveground Petroleum Storage Act instituting a regulatory program covering Aboveground Storage Tanks (ASTs) containing specified petroleum products

(HSC Sections 25270–25270.13). The Aboveground Petroleum Storage Act applies to facilities with storage capacities of 10,000 gallons or more or are subject to oil pollution prevention and response requirements under 40 CFR Part 112. Under the Aboveground Petroleum Storage Act, each owner or operator of a regulated aboveground storage tank (AST) facility must file biennially a storage statement with the SWRCB disclosing the name and address of the AST facility; the contact person for the facility; and the location, size, age, and contents of each AST that exceeds 10,000 gallons in capacity and that holds materials that are at least 5 percent petroleum. In addition, each owner or operator of a regulated AST must prepare a Spill Prevention Control and Countermeasure Plan in accordance with federal and state requirements (40 CFR Part 112 and HSC Section 25270.5[c]). The RWQCBs are responsible for inspecting ASTs and ensuring that Spill Prevention Control and Countermeasure Plans have been prepared.

Lead-Based Paint Regulations

Lead-based paint (LBP) is defined as any paint, varnish, stain, or other applied coating that has a 1 milligram per square centimeter (mg/cm^2) (5,000 microgram per gram [µg/g] or 0.5 percent by weight) or more of lead. The US Consumer Product Safety Commission (16 CFR 1303) banned paint containing more than 0.06 percent lead for residential use in 1978. Buildings built before 1978 are much more likely to have LBP. The demolition of buildings containing LBPs is subject to a comprehensive set of California regulatory requirements that are designed to assure the safe handling and disposal of these materials. Cal/OSHA has established limits of exposure to lead contained in dusts and fumes, which provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead, particularly since demolition workers are at greatest risk of adverse exposure. Lead-contaminated debris and other wastes must also be managed and disposed of in accordance with applicable provisions of the California HSC.

California Division of Occupational Safety and Health

Cal/OSHA is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials (8 CCR, Section 1529). Among other requirements, Cal/OSHA requires entities handling specified amounts of certain hazardous chemicals to prepare injury and illness prevention plans and chemical hygiene plans and provides specific regulations to limit exposure of construction workers to lead. OSHA applies to this project because contractors will be required to comply with its handling and use requirements that would increase worker safety and reduce the possibility of spills, and to prepare an emergency response plan to respond to accidental spills.

The Cal/OSHA program is administered and enforced by the California Division of Occupational Safety and Health. Cal/OSHA is very similar to the federal OSHA program. For example, both programs contain rules and procedures related to exposure to hazardous materials during demolition and construction activities. In addition, Cal/OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program, which is an employee safety program for potential workplace hazards, including those associated with hazardous materials.

The Safe Drinking Water and Toxic Enforcement Act

The Safe Drinking Water and Toxic Enforcement Act (HSC Section 25249.5, et seq.), Proposition 65, lists chemicals and substances believed to have the potential to cause cancer or deleterious reproductive effects in humans. It also restricts the discharges of listed chemicals into known drinking water sources above the regulatory levels of concern, requires public notification of any unauthorized discharge of hazardous waste, and requires that a clear and understandable warning be given prior to a known and intentional exposure to a listed substance.

California Water Code

The California Water Code authorizes the SWRCB to implement provisions of the Clean Water Act, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials and other pollutants. In regard to construction dewatering discharge analysis and treatment, groundwater may be encountered during deeper excavations for the subterranean parking structure, building foundations, or other subterranean building components. Under the California Water Code, discharges of any such groundwater to surface waters, or any point sources hydrologically connected to surface waters, such as storm drains, is prohibited unless conducted in compliance with a Waste Discharge Requirement permit. In addition to the California Water Code, these permits implement and are in compliance with the federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) program.

In accordance with these legal requirements, dewatering, treatment, and disposal of groundwater encountered during construction activities would be conducted in accordance with the San Francisco Bay RWQCB's Waste Discharge Requirement's adopted Order No. R2-2022-0018, NPDES Permit No. CAS612008, Municipal Regional Stormwater NPDES Permit. The City of Martinez is included as part of the Contra Costa Permittees. Compliance with an appropriate Waste Discharge Requirement permit would include monitoring, treatment if appropriate, and proper disposal of any encountered groundwater in accordance with applicable water quality standards. If, for example, extracted groundwater contains Total Petroleum Hydrocarbons (TPH) or other petroleum breakdown compounds in concentrations exceeding water quality standards, compliance with legal requirements would mandate treatment to meet published state water quality standards prior to discharge into a storm drain system.

Porter-Cologne Act

The Porter-Cologne Act gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool for the regulatory environment with respect to the State's authority over isolated and otherwise insignificant waters. Generally, in the event that there is no nexus to a Traditional Navigable Waters, any person proposing to discharge waste into waters of the State that could affect its water quality must file a Report of Waste Discharge. Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB also interprets this to include fill discharged into water bodies.

California Governor's Office of Emergency Services

In 2009, the State of California passed legislation creating the California Governor's Office of Emergency Services (Cal OES) and authorized it to prepare a Standard Emergency Management System program (Title 19 CCR Section 2401 et seq.), which sets forth measures by which a jurisdiction should handle emergency disasters. In California, the program provides the mechanism by which local governments request assistance. Non-compliance with the program could result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster. Cal OES coordinates the state's preparation for, prevention of, and response to major disasters, such as fires, floods, earthquakes and terrorist attacks. During an emergency, Cal OES serves as the lead state agency for emergency management in the state. It also serves as the lead agency for mobilizing the state's resources and obtaining federal resources. Cal OES coordinates the state response to major emergencies in support of local government. The primary responsibility for emergency management resides with the local government. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other

counties throughout the state through the statewide mutual aid system (see discussion of Mutual Aid Agreements, below). California Emergency Management Agency (Cal-EMA) maintains oversight of the state's mutual aid system.

The Cal OES Hazardous Materials (HazMat) section under the Fire and Rescue Division coordinates statewide implementation of hazardous materials accident prevention and emergency response programs for all types of hazardous materials incidents and threats. In response to any hazardous materials emergency, the HazMat section staff is called upon to provide state and local emergency managers with emergency coordination and technical assistance.

Emergency Managed Mutual Aid System

Cal OES developed the Emergency Managed Mutual Aid (EMMA) System in response to the 1994 Northridge Earthquake. The EMMA System coordinates emergency response and recovery efforts along the coastal, inland, and southern regions of California. The purpose of EMMA is to provide emergency management personnel and technical specialists to afflicted jurisdictions in support of disaster operations during emergency events. Objectives of the EMMA Plan is to provide a system to coordinate and mobilize assigned personnel, formal requests, assignment, training and demobilization of assigned personnel; establish structure to maintain the EMMA Plan and its procedures; provide the coordination of training for EMMA resources, including Standard Emergency Management System program training, coursework, exercises, and disaster response procedures; and to promote professionalism in emergency management and response. The EMMA Plan was updated in November 2012 and supersedes the 1997 EMMA Plan and November 2001 EMMA Guidance.

Regional

Bay Area Air Quality Management District Regulation 8, Rule 3

Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 3, Architectural Coatings, limits the quantity of volatile organic compounds (VOC) in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the District.

Bay Area Air Quality Management District Regulation 8, Rule 40

The purpose of BAAQMD Regulation 8, Rule 40, Aeration of Contaminated Soil and Removal of Underground Storage Tanks, is to limit the emission of organic compounds from soil that has been contaminated by organic chemical or petroleum chemical leaks or spills, and to provide an acceptable procedure for controlling emissions from underground storage tanks during removal or replacement. The rule also sets requirements on how to handle excavation, removal and/or treatment of contaminated soil (from any source of contamination) and provides operational and reporting requirements for the operation.

Bay Area Air Quality Management District Regulation 11

BAAQMD Regulation 11, Rule 1, Lead, controls the emission of lead to the atmosphere. The rule regulates standards, monitoring and recording, and emission limits.

BAAQMD Regulation 11, Rule 2, Asbestos Demolition, Renovation, and Manufacturing, regulates asbestos as a toxic material and controls the emissions of asbestos from demolition and renovation activities by specifying agency notifications, appropriate removal procedures, and handling and clean up procedures. This rule applies to owners and operators involved in the

demolition or renovation of structures with asbestos containing materials, asbestos storage facilities, and asbestos waste.

Contra Costa County Hazard Mitigation Plan

The Contra Costa County Hazard Mitigation Plan identifies activities that can be undertaken by both the public and private sectors to reduce risk to natural, human-caused, and technological hazards, property damage, and economic disruption caused by such hazards. This 5-year plan requires working with cities, special districts, and county departments across three main areas: 1) hazard identification, 2) mitigation action planning, and 3) public comment and outreach. Contra Costa County is currently in the process of updating its plan.[1] During the hazard identification phase, the planning team analyzed data on natural and human-caused hazards based on the likelihood, impact, and severity. Human-caused hazards include hazardous materials incidents, which can include, but not be limited to, uncontrolled release of hazardous materials from fixed sites/facilities, during transport (e.g., on highways or rail lines), and pipelines. The Hazard Mitigation Plan also supports measures compatible with the County's hazardous material program to reduce potential hazardous material releases, which is overseen by the Contra Costa County Fire Protection District and the Hazardous Materials Program Office of the Contra Costa Health Services.[2]

Contra Costa County Hazmat Programs

Contra Costa County Health Services' Hazardous Materials Programs administer the California Accidental Release Prevention (CalARP) Program and Industrial Safety Ordinances (ISO) by Contra Costa County and the City of Richmond. The Accidental Release Prevention Program has six full-time engineers that are required by the CalARP Program and the County's Industrial Safety Ordinance (ISO) to review and approve risk management and safety plans, review and follow-up on accidents/incidents and causes, and conduct investigations, inspections, auditing, and hazard scoring.

The County's ISO was established to expand on the CalARP requirements for specific facilities. Facilities that are subject to the ISO are in the unincorporated areas of the County, must be a chemical facility or a petroleum refinery, and a Program Level 3 facility under the CalARP Program. Six facilities are covered by the County's ISO, including PBF Energy – Martinez Refining Company (formerly Shell Oil Martinez Refinery, Martinez Renewable Fuels (formerly Marathon Refinery), Air Products within Martinez Refining Company, Air Products within Martinez Renewable Fuels, Phillips 66 Rodeo Refinery, and Air Liquide - Rodeo Hydrogen Plant.[3]

Certified Unified Program Agency

The primary local agency with responsibility for implementing federal and state laws and regulations pertaining to hazardous materials management is the Contra Costa County Health Services' Hazardous Materials Programs which is the CUPA for all businesses within the County. A CUPA is a local agency that has been certified by CalEPA to implement the state environmental programs within the local agency's jurisdiction. This program was established under the

1 Contra Costa County, News Flash, Local Hazardous Mitigation Plan Update 2024, available at: https://www.contracosta.ca.gov/CivicAlerts.aspx?AID=4722, accessed April 19, 2024.
2 Contra Costa County, 2024 Hazard Mitigation Plan, adopted November 5, 2024.
3 Contra Costa County Health Services, Health and Safety Information, Hazmat Programs, Industrial Safety Ordinance, available at: https://www.cchealth.org/health-and-safety-information/hazmat-programs/industrial-safety-ordinance, accessed March 5, 2025.

amendments to the California HSC made by Senate Bill 1082 in 1994. The six consolidated programs are:

- Hazardous Materials Release Response Plan and Inventory;
- California Accidental Release Prevention;
- Hazardous Waste (including Tiered Permitting);
- USTs;
- ASTs (Spill Prevention Control and Countermeasures requirements); and
- UFC Article 80 Hazardous Material Management Program and Hazardous Material Identification System.

As the CUPA for Contra Costa County, the Contra Costa County Health Services maintains the records regarding location and status of hazardous materials sites in the county and administers programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. With a CUPA, Contra Costa County has accurate and adequate information to plan for emergencies and/or disasters and to plan for public and firefighter safety.

Waste Discharge Requirements

Effective on July 1, 2022, the San Francisco Bay RWQCB adopted Order No. R2-2022-0018, NPDES Permit No. CAS612008, Municipal Regional Stormwater NPDES Permit. The City of Martinez is included as part of the Contra Costa Permittees. This permit specifies the following: 1) requirements to effectively prohibit nonstormwater discharges into the storm drain system, pursuant to Clean Water Act §402(p)(3)(B)(ii); 2) technology-based effluent limitations that require controls to reduce the discharge of pollutants to the “maximum extent practicable” pursuant to Clean Water Act § 402(p)(3)(B)(iii); and 3) water quality-based effluent limitations pursuant to Clean Water Act § 402(p)(3)(B)(iii), which authorizes the inclusion of “such other provisions as the Administrator or the State determines appropriate for the control of…pollutants,” for pesticides, trash, mercury, PCBs, bacteria, and sediment, in addition to technology-based effluent limitations. Water quality-based effluent limitations for these pollutants are appropriate for control because water quality standards are not being met and these pollutants have impaired waters.

Local

City of Martinez Annex Hazard Mitigation Plan

The City of Martinez Annex Hazard Mitigation Plan details the hazard mitigation elements specific to the City of Martinez, a participating jurisdiction to the 2024 Contra Costa County Hazard Mitigation Plan update. The Annex is not intended to be a standalone document but supplements the County Hazard Mitigation Plan update. The Annex provides additional information specific to the City, with a focus on providing additional details on the hazard risk assessment and mitigation strategy for the City. A vulnerability and impact assessment for hazardous materials incidents identified the three petrochemical refineries and one chemical manufacturing facility in or near Martinez. The assessment stated that in the case of major power outages and other mishaps, these facilities are designed to flare chemicals in order to reduce risk to the public. Some events have required shelter in place warnings to the community. The assessment also identified that the truck corridor that goes through the City may make it susceptible to transportation related

hazardous materials incidents.[4] In addition, hazardous materials incidents were ranked as medium-rated risks based on an evaluation of extent, vulnerability, impact, and consequence.

General Plan, Public Safety Element

The City of Martinez General Plan includes a Public Safety Element updated in 2022. As described therein, the City is surrounded by a heavy concentration of petroleum and chemical processing plants (some of which are located within or adjacent to the Concord-Green Valley Fault); therefore, the Martinez area may be subject to the occurrence of accidental releases of dangerous substances from a variety of sources. Further, hazardous chemicals are transported into and out of the area daily utilizing various transportation routes and systems. These include Interstate 680, Highway 4, some City and Contra Costa County streets; the Union Pacific and BNSF Railroads; access through San Pablo Bay, Carquinez Straits, and Suisun Bay; Buchanan Field; and petroleum and natural gas pipelines and pump stations. In the event of a hazardous materials emergency, the City's Emergency Response Plan specifies the primary responsibilities of responding agencies, based on the Contra Costa County management system for response to hazardous materials spills.[5]

The Public Safety Element includes following goal, policies, and measures related to hazardous materials:

- Goal PS-G-13: Minimize as feasible risks to life, property and the environment resulting from the use, storage, transportation, and disposal of hazardous materials.
    - Policy PS-P-13.1: Encourage adequate separation between areas that contain hazardous materials and sensitive receptors.
        - Measure PS-I-13.1a: Through land use policy and text amendments, establish an appropriate buffer between land uses involving hazardous materials and those where the presence of hazardous materials is incompatible.
    - Policy PS-P-13.2: Recommend that hazardous materials storage and handling areas are designed to minimize the possibility of environmental contamination and adverse off-site impacts.
    - Policy PS-P-13.3: Coordinate with appropriate local, state, and federal agencies regarding hazardous waste reduction, handling, and disposal.
    - Policy PS-P-13.4: Require that all processes involving hazardous waste (including its transportation, storage, and disposal) are conducted in a manner that meets or exceeds state and federal standards.
    - Policy PS-P-13.5: Comply with state law requiring adoption of a Hazardous Waste Management Plan.
        - Measure PS-I-13.5a: Maintain the Contra Costa Health Service Hazardous Waste Management Plan as the City's Plan.
    - Policy PS-P-13.6: Actively coordinate with other cities and the county to keep informed and mitigate and/or reduce hazards.
        - Measure PS-I-13.6a: Maintain information regarding train transport

[4] Contra Costa County, 2024 Hazard Mitigation Plan, City of Martinez Annex, 2024.
[5] City of Martinez, General Plan Public Safety Element, 2022.

through Martinez by working with the railroad and industrial users to manage transport of hazardous materials within the City boundaries.

3.7.2 Environmental Setting

Current and Historical Uses on the Project Site

As described in Chapter 2, Project Description, of this Draft EIR, the project site is located at the southern boundary of the existing Martinez Terminal industrial property. The project site comprises approximately 2.7 acres along the southern boundary of the Martinez Terminal and extends south of Waterfront Road to the existing UPRR tracks. The project would be situated within the Martinez Terminal property and within UPRR ROW, with Waterfront Road bisecting the project site. The project site is bounded by the northern portion of the Martinez Terminal property on the north, industrial and undeveloped lands on the east, the UPRR ROW on the south, and State lands and tidelands on the west.

The Phase I ESA accounted for approximately 31 acres of the railroad corridor (in APNs 159-310-038 and 159-310-036), inclusive of the project site, as part of its assessment; this area is herein referred to as “study area”. As described in the Phase I ESA, an 1896 topographic map depicts a railroad in its present-day alignment with a tributary extending northwest through the east-central portion of the study area and surroundings comprised of undeveloped marshlands. By the early 1940s, development of the Martinez Refinery began approximately 0.5 to 1 mile west of the study area along the railroad. Above-ground oil tanks were constructed in the area for nearby refineries in the late 1940s. Unpaved roads are visible in the areas north and south of the study area, and Waterfront Road was constructed in its present-day alignment. Interstate 680 and earlier highways were constructed southwest of the study area between 1952 and 1963. The TransMontaigne Martinez Terminal facility was constructed between the late 1960s and early 1980s. One structure at the south of the facility, used as a controls room, is located in the railroad corridor boundary. The eastern area of the facility was paved between 1998 and 2006. The facility and the railroad corridor appear to have a similar configuration since that time.

The current and past land uses within the study area were identified as part of the Phase I ESA to assess their potential to present concerns relative to the presence of hazards. These concerns are classified as Recognized Environmental Conditions (RECs), which are defined in Section 1.1.1 of the American Society for Testing and Materials (ASTM) Standard Practice as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The ASTM defines a Controlled Recognized Environmental Condition (CREC) as a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The ASTM defines a Historical Recognized Environmental Condition (HREC) as a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (e.g., activity and use limitations or other property use limitations). The Phase I ESA describes the following RECs, CRECs, and HRECs.

Recognized Environmental Conditions (RECs)

- Residual Chemicals Associated with Railroad Tracks: Residual chemicals including lead, arsenic, and polycyclic aromatic hydrocarbons are commonly found in near-surface soil in the alignment of railroad tracks and spurs. The presence of railroad tracks is classified as a REC.
- Tosco Pipeline – Wickland Releases (GeoTracker ID SL18360780):[6] At least seven historical releases of total petroleum hydrocarbons (TPH) occurred within the pipeline alignment adjacent to the south of the wetland. Residual TPH constituents may be found in the wetland. Contaminant maps provided in the most recent cleanup order (Order R2-2008-0019) show that the contaminant plume was located within the wetland. The cleanup case related to these releases is eligible for case closure as of November 2017; however, until the case is closed, these releases are classified as a REC. Once this case is closed, this REC may be reclassified as a HREC.
- TransMontaigne Martinez – Refinery Release (GeoTracker ID SL373211178):[7] Numerous releases have occurred in connection with refinery operations at the TransMontaigne Martinez Terminal. Extensive remedial actions have been implemented to achieve cleanup objectives. Most notably, in the southwestern area of the terminal (near the western portion of the project site), a phytoremediation system was installed in 2007 to contain dissolved-phase hydrocarbons and methyl tertiary butyl ether (MTBE) and limit potential discharges to the marsh. A groundwater extraction pump was also installed in a monitoring well in this region to contain groundwater while the roots of the phytoremediation system deepened. Residual contamination is managed through the land use covenant and Soil Management Plan. The Soil Management Plan, dated June 17, 2019, provides procedures and protocols for managing residual hydrocarbons in soil throughout the facility. The facility is eligible for closure related to petroleum contamination as of July 19, 2021.
- TransMontaigne Martinez Terminal – PFAS (GeoTracker ID L10005962342):[8] While the REC at the TransMontaigne Martinez Terminal facility is eligible for closure pertaining to TPH contamination, recent investigations have been conducted to evaluate the presence of per- and polyfluoroalkyl substances (PFAS) in groundwater under open cleanup case L10005962342. The case is listed to have long-term management (as of July 19, 2021). The PFAS investigation is outside the scope of the Phase I ESA. On December 20, 2023, the San Francisco Bay Regional Water Quality Control Board approved TransMontaigne Martinez Terminal's work plan for further investigation of PFAS contamination in groundwater.[9]

6 California State Water Resources Control Board, GeoTracker, Tosco Pipeline – Wickland (SL18360780), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL18360780, accessed April 17, 2024.

7 California State Water Resources Control Board, GeoTracker, TransMontaigne Martinez (SL373211178), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL373211178, accessed April 17, 2024.

8 California State Water Resources Control Board, GeoTracker, TransMontaigne Martinez Terminal PFAS (L10005962342), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=L10005962342, accessed April 17, 2024.

9 San Francisco Bay Regional Water Quality Control Board, Approval of Work Plan for PFAS Investigation – Round 3 and Request for Completion Report, TransMontaigne- Martinez Terminal, available at: https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/5578794181/PFAS_20231220_mt.pdf, accessed April 17, 2024.

Controlled Recognized Environmental Conditions (CRECs)

- A Covenant and Environmental Restriction was recorded on March 12, 2020, (with the GeoTracker entry dated August 16, 2023) and affects the entire TransMontaigne parcel (APN 159-310-038).[10] The covenant indicates that soil and groundwater underlying the property contain hazardous materials (TPH) due to historical releases from refinery operations. The land use covenant references the 2019 Soil Management Plan prepared by Apex, which summarizes procedures for the appropriate management of separate phase hydrocarbons (SPH) and associated petroleum-impacted soil and groundwater during future redevelopment or other on-site maintenance activities at the site.

Historical Recognized Environmental Conditions (HRECs)

- Kinder Morgan Pipeline Release (GeoTracker ID SL1824X1162):[11] In December 2000, a petroleum spill from a Kinder Morgan Energy Partners, LP (KMEP) pipeline was discovered on the southern side of Waterfront Road where it crosses Pacheco Creek (eastern portion of the study area), when petroleum hydrocarbons became visible on the ground surface and surface water north of the railroad tracks. The cleanup case is documented under GeoTracker case ID SL1824X1162. The pipeline leak resulted in a spill volume of approximately 50 barrels, which impacted a wetland slough system adjacent to Pacheco Creek and threatened to impact additional waters through further migration. KMEP implemented emergency response protocols to contain the spill and remove impacted soil. The Regional Water Quality Control Board issued a Cleanup and Abatement Order on January 25, 2001, in response to the spill. KMEP implemented a wetland mitigation plan and subsequent monitoring report. In July 2013, the Cleanup Abatement Order was rescinded, and the cleanup case was closed.

Hazardous Materials Database Search

The Phase I ESA included a database search of the study area and surrounding properties based on various federal, state, and local databases (refer to Appendix A of the Phase I ESA).

Study Area

The database records search showed that the study area, as identified by the names of various facilities located at 2801 Waterfront Road, is listed in various environmental databases, including:

- California Facility Inventory Database (CA FID UST)
- California Hazardous Material Incident Report (CHMIRS) California Integrated Water Quality System (CIWQS)
- California Environmental Reporting System (CERS)
- Cleanup Program Sites Site Cleanups (CPS-SLIC)
- Contra Costa County Site List

[10] California State Water Resources Control Board, GeoTracker, TransMontaigne Martinez (SL373211178), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL373211178, accessed April 17, 2024.

[11] California State Water Resources Control Board, GeoTracker, Kinder Morgan Pipe Line Release PFAS (SL1824X1162), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL1824X1162, accessed April 17, 2024.

- Cortese List
- Historical “Cortese” Hazardous Waste & Substances List (HIST CORTESE)
- DTSC EnviroStor
- Emissions Inventory Data (EMI)
- Emergency Response Notification System (ERNS)
- Enforcement Action Listing (ENF)
- EPA Aeromatic Information Retrieval System (AIRS)
- EPA Enforcement and Compliance History Online (ECHO)
- EPA Facility Index System (FINDS)
- EPA Fuels Program
- EPA Integrated Compliance Information System (ICIS)
- Hazardous Waste Manifests Database (HAZNET)
- Hazardous Waste Tracking System (HWTS)
- Leaking Underground Storage Tank (LUST)
- Aboveground Petroleum Storage Tank Facilities (AST)
- National Pollutant Discharge Elimination System (NPDES)
- Recovered Government Archive Leaking Underground Storage Tank (RGA LUST)
- Risk Management Plan (RMP)
- Resource Conservation and Recovery Act Nongenerators/No Longer Regulated (RCRA NONGEN/NLR)
- Resource Conservation and Recovery Act Large Quantity Generators (RCRA LGQ)
- Superfund Enterprise Management System (SEMS) Archive
- Waste Discharge System Database (WDS)
- Waste Management Unit Database System/Soil and Water Assessment Tool (WMUDS/SWAT)

Surrounding Properties

The study area is located in a historically and presently industrial area with numerous documented releases. Based on the distances to the identified database sites, regional topographic gradient, and the environmental records search findings, it is possible that the above-stated database sites and “orphan” properties pose an environmental risk to the property.

The Phase I ESA also reviewed surrounding properties to evaluate the potential for contaminant migration to the project site. The environmental databases included:

- 2020 Corrective Action Program List (2020 COR ACTION)
- California Environmental Reporting System (CERS)
- California Integrated Water Quality System (CIWQS)

- Cleanup Program Sites Site Cleanups (CPS-SLIC)
- Contra Costa County Site List
- Deed Restriction Listing (DEED)
- Hazardous Waste Program Registry (HWP)
- Historical “Cortese” Hazardous Waste & Substances List (HIST CORTESE)
- DTSC EnviroStor
- DTSC Remediation sites (RESPONSE)
- Emissions Inventory Data (EMI)
- Enforcement Action Listing (ENF)
- EPA Enforcement and Compliance History Online (ECHO)
- EPA Facility Index System (FINDS)
- Hazardous Waste Manifests Database (HAZNET)
- Hazardous Waste Tracking System (HWTS)
- Leaking Underground Storage Tank (LUST)
- Aboveground Storage Tank (AST)
- Historic Underground Storage Tanks (HIST UST)
- ICE (contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in EnviroStor),
- Statewide Environmental Evaluation and Planning System UST (SWEEPS UST)
- National Pollutant Discharge Elimination System (NPDES)
- Resource Conservation and Recovery Act Corrective Action (CORRACTS)
- Resource Conservation and Recovery Act Nongenerators/No Longer Regulated (RCRA NONGEN/NLR)
- Resource Conservation and Recovery Act Large Quantity Generators (RCRA LGQ)
- Resource Conservation and Recovery Act Small Quantity Generators (RCRA SGQ)
- Resource Conservation and Recovery Act Treatment, Storage, and Disposal Facilities (RCRA TSDF)
- Superfund Enterprise Management System (SEMS)
- Superfund Enterprise Management System (SEMS) Archive
- Solid Waste Information System/Landfills (SWF/LF)
- State Water Resources Control Board Toxic Pits
- Financial Assurance Information (US FIN ASSUR)
- Voluntary Cleanup Program Properties (VCP)
- Waste Discharge System Database (WDS)

- Waste Management Unit Database System/Soil and Water Assessment Tool (WMUDS/SWAT)

Polychlorinated Biphenyl (PCB) Containing Equipment

Typical sources of polychlorinated biphenyls (PCBs) include electrical transformer cooling oils, fluorescent light fixture ballasts, and hydraulic oil. In 1976, the U.S. Environmental Protection Agency (USEPA) banned the manufacture and sale of PCB-containing transformers. Prior to this date, transformers were frequently filled with a dielectric fluid containing PCB-laden oil. Due to their hazardous properties, all aspects of PCBs are strictly regulated by the USEPA under the Toxic Substances Control Act. These regulations ban the manufacture of PCBs although the continued use of existing PCB-containing equipment is allowed. Transformer oil containing PCBs at a concentration exceeding five parts per million is the California-regulated concentration for hazardous waste though PCBs in transformer oil at a concentration up to 50 parts per million are currently allowed in transformers in California. The Toxic Substances Control Act also contains provisions controlling the continued use and disposal of existing PCB-containing equipment. The Phase I ESA indicates that railroad track switches are potential PCB-containing equipment.

Asbestos-Containing Materials (ACMs)

Asbestos is a naturally occurring mineral made up of microscopic fibers. Asbestos has unique qualities that include its strength, fire resistance, resistance to chemical corrosion, poor conduction of heat, noise, and electricity, and low cost. Asbestos was widely used in the building industry starting in the late 1800s and up until the late 1970s for a variety of uses, including acoustic and thermal insulation and fireproofing, and is often found in ceiling and floor tiles, linoleum, pipes, structural beams, and asphalt. Despite its useful qualities, asbestos becomes a hazard if the fibers separate and become airborne. Inhalation of airborne asbestos fibers could cause lung diseases.

As construction of the TransMontaigne Martinez Terminal facility was constructed between the late 1960s and early 1980s with the eastern portion of the facility paved between 1998 and 2006, it is possible that the building and paving materials contain asbestos-containing materials.

3.7.3 Methodology

To evaluate potential impacts relative to hazards and hazardous materials, a Phase I ESA was prepared for the project site in accordance with the requirements of ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Standard E1527-21) and the standards and practices of the All Appropriate Inquiry Final Rule (40 Code of Federal Regulations Part 312). This assessment included a review of local, state, tribal, and federal environmental record sources; standard historical sources; aerial photographs; fire insurance maps; and physical setting sources. A reconnaissance of the study area was completed to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials and to conduct written/oral interviews with persons knowledgeable about current and past site use.

In addition, soil sampling was conducted at the project site in response to RECs identified by the Phase I ESA, as described in the Soil Sampling Report. A total of 41 soil samples were collected on May 7 and May 8, 2024, from 24 locations within the project site boundaries. Samples were generally collected at depths of 6 to 12 inches and 18 to 24 inches below the ground surface. The soil sample results were compared to the San Francisco Bay RWQCB environmental screening levels for construction worker exposure.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to hazards and hazardous materials are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to hazards and hazardous materials if it would:

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

The Appendix G significance criteria noted below were scoped out of the analysis for further consideration in the Initial Study (Appendix A), and are discussed in Chapter 4, Other CEQA Considerations, of this Draft EIR.

- Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- For a project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

3.7.4 Impact Analysis

HAZ-1 Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction

Implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction activities would be temporary in nature and would involve the limited transport, storage, use, and disposal of hazardous materials for the purpose of developing the proposed project. Limited hazardous waste would be generated by the proposed project and would consist of fuel and oils associated with construction equipment, as well as liquid waste such as coatings, adhesives, cleaning fluids, herbicides, and solvents. Solid hazardous waste, such as welding materials, may also be generated during construction. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the California DTSC, US EPA, and OSHA. These materials would be transported to the project site during construction and any hazardous materials that are produced as a result of construction would be collected and disposed of off-site in accordance with applicable federal, State, and local regulations and disposed of at a Class I landfill.

During construction, material safety data sheets for hazardous materials present on-site would be made readily available to on-site personnel to ensure awareness and proper handling in accordance with required BMPs as part of a Stormwater Pollution Prevention Plan (SWPPP) (see Section 3.8, Hydrology and Water Quality). The SWPPP requires workers to be trained to properly identify and handle all hazardous materials and report potential health hazards. Spill prevention and containment for construction of the proposed project would adhere to the US EPA's guidance on Spill Prevention Control and Countermeasures. Overall, the relatively limited use of hazardous materials, as well as the transport and disposal of such materials, during construction would occur in conformance with applicable federal, State, and local regulations governing such activities. As such, proposed project construction is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

Operation

Under existing operations, pursuant to the existing emergency response plan and spill prevention plan that covers the Martinez Terminal, personnel have access to adequate spill containment and cleanup resources on-site at all times and are prepared to contain, control, clean up, and dispose of any potential fuel spill quickly and completely. The Martinez Terminal property is currently developed with pipelines, storage tanks, office space, and related facilities associated with its operation as a storage and transportation hub for petroleum and renewable products and related feed and blend stocks. The facilities at Martinez Terminal are currently designed to ensure hazardous materials are properly contained and that such substances would not spill or leak, in adherence with federal, State, and local regulations. Implementation of the proposed project includes the reestablishment of a rail spur that would bring railcars to the Martinez Terminal property for the transfer of products to and from the above-ground storage tanks, including a range of petroleum-based and renewable products, feed stocks, and blend stocks commodities. During operation of the proposed project, the types of products that would be transported to and from and stored at the terminal would be similar to products currently stored and transported under existing operations at the Martinez Terminal. As such, the existing emergency response plan and spill prevention plan that covers the Martinez Terminal would be updated to include the project site and operations associated with the proposed project, including provisions for spill containment and cleanup resources. With adherence to the emergency response plan and applicable regulations, operation of the proposed project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

HAZ-2 Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction

Recognized Environmental Conditions

As discussed in Section 3.7.2, the RECs in the study area include one related to the Tosco Pipeline releases and one related to the TransMontaigne Martinez Terminal releases related to petroleum contamination. Cleanup and abatement activities associated with the Tosco Pipeline REC have been conducted since 1990, while cleanup and abatement activities associated with the TransMontaigne Martinez Terminal releases have been conducted since 2002. Both of these RECs are eligible for case closures as of November 2017 and July 2021, respectively.

Additionally, the land use covenant, which was recorded for the entire TransMontaigne Martinez Terminal parcel (APN 159-310-038), indicates that soil and groundwater underlying the property contain hazardous materials (TPH) due to historical releases from refinery operations. The land use covenant refers to the aforementioned Soil Management Plan, which summarizes procedures for the appropriate management of separate-phase hydrocarbons (SPH) and associated petroleum-impacted soil and groundwater during future redevelopment or other on-site maintenance activities at the site. As described above, a CREC is defined as a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. As determined in the Phase I ESA, since hazardous substances or petroleum products are allowed to remain in place with the required controls and procedures of the land use covenant and the referenced Soil Management Plan, the property is considered a CREC.

Another REC associated with the TransMontaigne Martinez Terminal is related to PFAS in groundwater but is identified as having long-term management (GeoTracker ID L10005962342). Specifically, the San Francisco Bay Regional Water Quality Control Board has approved TransMontaigne Martinez Terminal's work plan for further investigation of PFAS contamination in groundwater.[12]

As such, with anticipated case closures for such RECs and further investigation for the CREC, the Phase I ESA does not recommend further environmental studies pertaining to petroleum contamination within the railroad corridor. Based on the extent of remediation activities and continued regulatory oversight, the RECs and CREC related to petroleum contamination would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Nonetheless, as described in Chapter 2, Project Description, site preparation activities would include excavation and grading of existing soil. The presence of railroad tracks is classified as a REC due to residual chemicals including lead, arsenic, and polycyclic aromatic hydrocarbons that are commonly found in near-surface soil in the alignment of railroad tracks and spurs. Therefore, the Phase I ESA recommended additional near-surface soil sampling to be conducted along the alignment of the railroad spur that is to be redeveloped, which was completed in May 2024. The results of the soil sampling indicated that elevated levels of arsenic, lead, and cobalt exceeding the environmental screening levels for construction worker exposure exist in the shallow soils along the entire proposed rail spur alignment. Due to the potential to encounter contaminated soils during grading and excavation activities, implementation of Mitigation Measure HAZ-A, requiring preparation of a project-specific soil management plan, and Mitigation Measure HAZ-B, requiring construction workers to minimize contact with contaminated soils through use of personal protective equipment, would be required to reduce potential impacts related to the handling of contaminated soils. Furthermore, the project applicant would be required to prepare a HASP pursuant to OSHA requirements. The project would also be required to comply with TCSA lead abatement regulations and BAAQMD Regulation 11, Rule 1, regarding lead standards, monitoring and recording, and emission limits. Although excavated soils would be stored within the Martinez Terminal property and would not be exported, if the excavated soils are removed from the property in the future, additional soil testing would be required, as outlined in Mitigation Measure HAZ-C. If the excavated soils are removed from the Martinez Terminal property in the

[12] California State Water Resources Control Board, GeoTracker, TransMontaigne Martinez Terminal PFAS (L10005962342), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=L10005962342, accessed April 17, 2024.

future, the handling, transport, and disposal of potentially contaminated soils would be conducted in accordance with all applicable hazardous waste criteria determined appropriate based on additional soil testing. With adherence to existing regulatory requirements and implementation of Mitigation Measures HAZ-A, HAZ-B, and HAZ-C, impacts related to encountering contaminated soils would be less than significant.

Use, Handling, and Storage of Hazardous Materials

During construction activities, limited hazardous waste would be generated by the proposed project and would consist of fuel and oils associated with construction equipment, as well as liquid waste, including coatings, adhesives, cleaning fluids, herbicides, and solvents. Solid hazardous waste, such as welding materials, may also be generated during construction. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the California DTSC, US EPA, and OSHA. Any hazardous materials that are produced as a result of construction would be collected and disposed of off-site in accordance with applicable federal, State, and local regulations and disposed of at a Class I landfill. Any potentially hazardous materials used during construction would be used and disposed of in accordance with manufacturers' specifications and instructions, thereby reducing the risk of hazardous materials release. In addition, as described in Section 3.7.1 above, there are regulations establishing specific guidelines regarding risk planning and accident prevention, protection from exposure to specific chemicals, and the proper storage of hazardous materials. With adherence to existing regulations, impacts related to the use, handing, and storage of hazardous materials would be less than significant during construction.

Polychlorinated Biphenyls and Asbestos-Containing Materials

With regard to PCBs, while railroad track switches may contain PCBs, the proposed railroad spur construction would not disturb the railroad track switches located in the southwestern railroad corridor. With regard to ACMs, based on the age of building and paving materials, it is possible that ACMs would be removed during construction. Adherence to existing regulations, such as BAAQMD Regulation 11, Rule 2, would effectively avoid worker exposure to such hazardous materials that may be encountered on-site during construction activities. Therefore, with adherence to applicable regulations, impacts related to PCBs and ACMs would be less than significant.

Aboveground Storage Tanks and Underground Storage Tanks

According to the Phase I ESA, no ASTs or evidence of existing USTs were observed within the proposed reestablished rail spur area during the site reconnaissance. In the unlikely event that USTs, underground facilities, buried debris, waste drums, tanks, and stained or odorous soils are found within the project site, suspect materials would be removed in accordance with all applicable federal, state, and local regulations. The project-specific soil management plan outlined in Mitigation Measure HAZ-A would ensure safe handling of potentially contaminated soils within the project site. In addition, in the unlikely event that a UST or AST is discovered on or in proximity to the project site, compliance with applicable permitting, notification, and worker safety regulations and programs would ensure construction worker safety at and near sites with potential contamination. Adherence to these regulations and programs and implementation of Mitigation Measure HAZ-A would minimize worker exposure to hazardous materials that may be encountered on-site during construction activities. Therefore, with adherence to existing regulatory requirements and implementation of Mitigation Measure HAZ-A, the proposed project would not create a significant hazard to the public or the environment through reasonably

foreseeable upset and accident conditions involving USTs, ASTs, or other buried materials, and impacts would be less than significant.

Waste Discharge Requirements

As discussed in Section 3.2, Biological Resources, construction of the proposed project would result in temporary and permanent impacts to wetlands under the jurisdiction of the USACE and RWQCB. As such, implementation of the proposed project would require a Waste Discharge Requirement Permit pursuant to Section 401 of the Clean Water Act and Section 13263 of the Porter-Cologne Act prior to commencement of construction activities occurring within jurisdictional aquatic features. Payment of fees pursuant to RWQCB permitting regulations would also be required. Additionally, the proposed project would be required to adhere to USACE permitting requirements pursuant to Section 404 of the Clean Water Act. As such, the Project Applicant would be required to coordinate with the USACE and RWQCB pursuant to permitting requirements under the Clean Water Act Sections 401 and 404 and the Porter-Cologne Act. With adherence to existing permitting regulations, impacts related to waste discharge requirements would be less than significant during construction.

Operation

As discussed above under Threshold HAZ-1, operation of the proposed project would include the transport and storage of petroleum based products, feed stocks and bend stocks commodities, similar to the existing products transported and stored at the Martinez Terminal. Additionally, the proposed project would not affect existing rail traffic, as the cars would be added to one of the two existing local freight trains currently operating in the area. To account for the reestablished rail spur, the existing emergency response plan and spill prevention plan that covers the Martinez Terminal would be updated to include the project site and its operations. As such project personnel would have available adequate spill containment and cleanup resources on-site to contain, control, clean up, and dispose of any potential fuel spill quickly and completely.

The project would comply with all applicable federal, state, and local requirements concerning the use, storage, and management of hazardous materials during operation. Therefore, the operation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of potentially hazardous materials, and impacts would be less than significant.

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

As discussed in Section 3.7.2 and the Phase I ESA, the database records search showed that the study area, as identified by the names of various facilities located at 2801 Waterfront Road, is listed in various environmental lists and databases, including the Cortese List, GeoTracker, and DTSC's EnviroStor.

Construction

As detailed under Threshold HAZ-2, the RECs related to the Tosco Pipeline releases and the TransMontaigne Martinez Terminal releases related to petroleum contamination are eligible for

case closures.[13,14] With anticipated case closures for such RECs and regulatory oversight for the CREC, the conditions would not create a significant hazard to the public or the environment. However, due to the presence of residual chemicals including lead, arsenic, and polycyclic aromatic hydrocarbons commonly found in near-surface soil in the alignment of railroad tracks and spurs, the Phase I ESA recommended additional near-surface soil sampling to be conducted along the alignment of the railroad spur that is to be redeveloped, which was completed in May 2024. The results of the soil sampling, as included in the Soil Sampling Report, indicated that elevated levels of arsenic, lead, and cobalt exceeding the environmental screening levels for construction worker exposure exist in the shallow soils along the entire proposed rail spur alignment. As outlined in Mitigation Measure HAZ-A, the Project Applicant would be required to prepare a project-specific soil management plan prior to construction activities to outline soil management procedures and protocols for the handling of unforeseen environmental conditions if encountered. Additionally, Mitigation Measure HAZ-B requires that construction workers use appropriate personal protective equipment to minimize contact with contaminated soils. The Project Applicant would also be required to prepare a HASP pursuant to OSHA requirements, as well as comply with BAAQMD regulations. Finally, while excavated soils are not proposed to be exported, should future removal of these soils be necessary, Mitigation Measure HAZ-C requires that excavated soils undergo additional testing prior to removal. With adherence to existing regulatory requirements and implementation of Mitigation Measures HAZ-A, HAZ-B, and HAZ-C, the proposed project would not create a significant hazard to the public or environment, and impacts during construction would be reduced to less than significant.

Operation

As previously discussed, the existing emergency response plan and spill prevention plan that covers the Martinez Terminal would be updated to include the project site and its operations. As such project personnel would have available adequate spill containment and cleanup resources on-site to contain, control, clean up, and dispose of any potential fuel spill quickly and completely. Operation of the proposed project would comply with all applicable federal, state, and local requirements concerning the use, storage, and management of hazardous materials. With adherence to existing regulations, impacts during operation of the proposed project would be less than significant.

3.7.5 Mitigation Measures

To reduce potential significant impacts related to creating a significant hazard to the public or the environment, the following mitigation measures would be implemented during construction the proposed project:

HAZ-A Prior to construction activities, a project-specific soil management plan shall be prepared that outlines soil management procedures and protocols for handling previously unidentified contaminated soils.

[13] California State Water Resources Control Board, GeoTracker, Tosco Pipeline – Wickland (SL18360780), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL18360780, accessed April 17, 2024.

[14] California State Water Resources Control Board, GeoTracker, TransMontaigne Martinez (SL373211178), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL373211178, accessed April 17, 2024.

HAZ-B All construction personnel shall utilize personal protective equipment during grading, excavation, and all other activities involving the handling of soils to minimize contact with contaminated soils. Such equipment may include, but not be limited to, gloves, safety glasses or goggles, hard hats, coveralls, shoe covers, and respirators with HEPA filters.

HAZ-C If excavated soils stored within the Martinez Terminal property are removed from the site, additional lab testing of such soils for organochlorine pesticides, polychlorinated biphenyls, semivolatile organic compounds, asbestos, and any other constituent testing required by the receiving facility shall be conducted prior to soil removal.

3.7.6 Level of Significance After Mitigation

Implementation of Mitigation Measures HAZ-A, HAZ-B, and HAZ-C would ensure that impacts related to creating a significant hazard to the public or the environment during project construction would be less than significant.

3.7.7 Cumulative Impacts

Development of the proposed project in combination with the related projects has the potential to increase the risk for an accidental release of hazardous materials. Each related project would require evaluation for potential threats to public safety, including those associated with the use, storage, and/or disposal of hazardous materials would be required to comply with all applicable local, state, and federal laws, rules and regulations, as discussed above for the project. Because environmental safety issues are largely site-specific, this evaluation would occur on a case-by-case basis for each individual project affected. Therefore, with full compliance with all applicable local, state, and federal laws, rules and regulations, as well as implementation of site-specific recommendations for the related projects and the proposed project, significant cumulative impacts related to hazards and hazardous materials would not occur. As such, the proposed project's impacts with regard to hazards and hazardous materials would not be cumulatively considerable, and cumulative impacts related to hazards and hazardous materials would be less than significant.

3.8 HYDROLOGY AND WATER QUALITY

This section analyzes the proposed project's potential impacts on hydrology (drainage flows), surface water quality, groundwater levels, and groundwater quality. The analysis is based, in part, on the Stormwater Report prepared for the project by JMA Civil, Inc. in February 2024, which is included in Appendix G of this Draft EIR.

3.8.1 Regulatory Setting

Federal

Clean Water Act

The Clean Water Act (CWA), formerly known as the Federal Water Pollution Control Act, was first introduced in 1948, with major amendments in the 1960s, 1970s and 1980s. The CWA authorizes Federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. Amendments to the CWA in 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program, which prohibits discharge of pollutants into the nation's waters without procurement of a NPDES permit from the United States Environmental Protection Agency (USEPA). The purpose of the permit is to translate general requirements of the Clean Water Act into specific provisions tailored to the operations of each organization that is discharging pollutants. Although federally mandated, the NPDES permit program is generally administered at the state and regional levels.

The Phase I stormwater rule was promulgated in 1990 under the CWA. Phase I relies on NPDES permit coverage to address stormwater runoff from: (1) medium and large municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, (2) construction activity disturbing 5 acres of land or greater, and (3) ten categories of industrial activity. The Phase II stormwater rule represents the second step in the USEPA's effort to preserve, protect, and improve the nation's water resources from polluted stormwater runoff. The Phase II rule was promulgated in 1999. The Phase II program expands upon the Phase I program by requiring operators of small MS4s in urban areas with a population 50,000 or more people and operators of small construction sites (one to five acres) to obtain NPDES permit coverage, and to implement programs and practices to control polluted stormwater runoff.

Under CWA Section 303(d), states must review, make necessary changes, and submit a 303(d) list (i.e. list of waters not meeting water quality standards) to the USEPA. The 303(d) list also sets the Water Boards' priorities for development of Total Maximum Daily Loads (TMDLs) and other regulatory programs aimed at resolving the impairments.

Section 401, Water Quality Certification, requires an applicant for a federal license or permit that proposes an activity that may result in a discharge into waters of the United States to obtain certifications from the state that the discharge will comply with other provisions of the act.

Section 404 establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is jointly administered by the U.S. Army Corps of Engineers (USACE) and the USEPA.

Numerous agencies have responsibilities for administration and enforcement of the CWA. At the federal level, this includes the USEPA and the USACE, while at the state level, with the exception of tribal lands, this includes the California Environmental Protection Agency (CalEPA) and its sub-agencies, including the State Water Resources Control Board (SWRCB).

Federal Antidegradation Policy

The Federal Antidegradation Policy has been incorporated within the Clean Water Act and requires states to develop state-wide antidegradation policies and identify methods for implementing them. Pursuant to the Code of Federal Regulations, state antidegradation policies and implementation methods must, at a minimum, protect and maintain: (1) existing in-stream water uses; (2) existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

Safe Drinking Water Act

The Safe Drinking Water Act is the main federal law that ensures the quality of the Nation's drinking water. The Safe Drinking Water Act was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. Under the Safe Drinking Water Act, the USEPA sets standards for drinking water quality and oversees the states, localities, and water suppliers that implement those standards. The Safe Drinking Water Act regulates contaminants of concern in domestic water supply, including maximum contaminant levels, and that the EPA has delegated the California Department of Public Health the responsible agency for administering California's drinking water program. Maximum contaminant levels are established under CCR Title 22, Div. 4, Ch. 15, Article 4 (Title 22 Standards).

National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards. FEMA provides flood insurance rate maps (FIRMs) for local and regional planners to promote sound land use and development practices by identifying potential flood areas based on the current conditions. To delineate a FIRM, FEMA conducts engineering studies referred to as flood insurance studies. Using information gathered in these studies, FEMA engineers and cartographers delineate special flood hazard areas on FIRMs.

The Flood Disaster Protection Act requires owners of all structures within identified special flood hazard areas to purchase and maintain flood insurance as a condition of receiving federal or federally-related financial assistance, such as mortgage loans from federally insured lending institutions. Community members within designated areas are able to participate in the National Flood Insurance Program afforded by FEMA.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code Section 13000 *et seq*.; California Code of Regulations. Title 23, Chapters 3 and 15) established the legal and regulatory framework for California's water quality control. The California Water Code authorizes the State Water Resources Control Board to implement the provisions of the CWA, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials and other pollutants. In California, the NPDES stormwater permitting program is administered by the SWRCB.

Under the California Water Code, the State of California is divided into nine Regional Water Quality Control Boards (RWQCBs), which govern the implementation and enforcement of the

California Water Code and the CWA. The project site is located within Region 2, also known as the San Francisco Bay RWQCB. The RWQCBs develop and enforce water quality objectives and implement plans to protect California's waters, acknowledging areas of different climate, topography, geology, and hydrology. Each RWQCB is required to formulate and adopt a Water Quality Control Plan or Basin Plan for its region. The Basin Plan establishes beneficial use definitions for the various types of water bodies, and serves as the basis for establishing water quality objectives, discharge conditions and prohibitions, and must adhere to the policies set forth in the California Water Code and established by the SWRCB. The RWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water quality.

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB in 1968. Unlike the federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the State, not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual basin plans, such high quality shall be maintained and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of such water resource.

California Toxics Rule

In 2000, CalEPA promulgated the California Toxics Rule, which establishes water quality criteria for certain toxic substances to be applied to waters in the State. CalEPA promulgated this rule based on CalEPA's determination that the numeric criteria of specific concentrations of regulated substances are necessary for the State to protect human health and the environment. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water such as inland surface waters and enclosed bays and estuaries that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health.

The Safe Drinking Water and Toxic Enforcement Act

The Safe Drinking Water and Toxic Enforcement Act (HSC Section 25249.5, et seq.), Proposition 65, lists chemicals and substances believed to have the potential to cause cancer or damaging reproductive effects in humans. It also restricts the discharges of listed chemicals into known drinking water sources above the regulatory levels of concern, requires public notification of any unauthorized discharge of hazardous waste, and requires that a clear and understandable warning be given prior to a known and intentional exposure to a listed substance.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 requires the designation of groundwater sustainability agencies by one or more local agencies and the adoption of groundwater sustainability plans for basins designated as medium- or high-priority by the California Department of Water Resources. The Sustainable Groundwater Management Act grants new powers to groundwater sustainability agencies, including the power to adopt rules, regulations, ordinances, and resolutions; regulate groundwater extractions; and to impose fees and assessments. The Sustainable Groundwater Management Act also allows the SWRCB to intervene if local agencies will not or do not meet the Sustainable Groundwater Management Act requirements, in addition to mandating that critically overdrafted basins be sustainable by 2040, and medium- or high-priority by 2042.

California Groundwater Bulletin 118

The California Department of Water Resources publishes California's Groundwater (Bulletin 118) to provide an inventory and assessment of available groundwater information and inform decisions affecting groundwater protection, use, and management. The document is updated every five years to meet requirements of the California Water Code (Section 12924). The requirements include investigating groundwater basins, establishing basin boundaries, and identifying basins that are subject to critical conditions of overdraft. As part of assessing California's groundwater resources, the Department of Water Resources also documents basin priority and groundwater use, management, monitoring, and conditions. The Department of Water Resources published California Groundwater Update 2020, which is the most up-to-date set of statewide groundwater data and information and is a continuation of a series of earlier publications of Bulletin 118. It provides a foundation for knowledge supporting resilient statewide groundwater management and planning efforts, including drought planning and response.[1]

Regional

National Pollutant Discharge Elimination System Storm Water Permitting Program

As described above, the NPDES stormwater program regulates stormwater discharges from three potential sources: municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. The NPDES stormwater permitting program is administered by the SWRCB through its nine RWQCBs.

Effective on July 1, 2022, the San Francisco Bay RWQCB adopted Order No. R2-2022-0018, NPDES Permit No. CAS612008, Municipal Regional Stormwater NPDES Permit. The City of Martinez is included as part of the Contra Costa Permittees. This permit specifies the following: 1) requirements to effectively prohibit non-stormwater discharges into the storm drain system, pursuant to CWA §402(p)(3)(B)(ii); 2) technology-based effluent limitations that require controls to reduce the discharge of pollutants to the "maximum extent practicable" (MEP) pursuant to CWA §402(p)(3)(B)(iii); and 3) water quality-based effluent limitations (WQBELs) pursuant to CWA §402(p)(3)(B)(iii), which authorizes the inclusion of "such other provisions as the Administrator or the State determines appropriate for the control of…pollutants," for pesticides, trash, mercury, PCBs, bacteria, and sediment, in addition to technology-based effluent limitations. WQBELs for these pollutants are appropriate for control because water quality standards are not being met and these pollutants have resulted in impaired waters. If, for example, extracted groundwater contains Total Petroleum Hydrocarbons (TPH) or other petroleum breakdown compounds in concentrations exceeding water quality standards, compliance with legal requirements would mandate treatment to meet published state water quality standards prior to discharge into a storm drain system.

Construction General Permit

In addition, the SWRCB has established the General Permit for Stormwater Discharges from Construction Activities (Construction General Permit), which is a risk-based approach to stormwater control requirements for construction projects. For all construction activities disturbing one acre of land or more, California mandates the development and implementation of Stormwater Pollution Prevention Plans (SWPPP). The SWPPP documents the selection and implementation of best management practices (BMPs) to prevent discharges of water pollutants to surface or groundwater. The SWPPP also charges owners with stormwater quality management responsibilities. The developer or contractor for a construction site subject to the

[1] California Department of Water Resources, California's Groundwater Update 2020 Fact Sheet.

Construction General Permit must prepare and implement a SWPPP that meets the requirements of the Construction General Permit. The purpose of a SWPPP is to identify potential sources and types of pollutants associated with construction activity and list BMPs that would prohibit pollutants from being discharged from the construction site into the public stormwater system. BMPs typically address stabilization of construction areas, minimization of erosion during construction, sediment control, control of pollutants from construction materials, and post-construction stormwater management (e.g., the minimization of impervious surfaces or treatment of stormwater runoff). The SWPPP is also required to discuss maintenance and inspections of BMPs. In addition, dewatering activities may be subject to actions required by Attachment J of the Construction General Permit. The most recently adopted Construction General Permit (Order WQ 2022-0057-DWQ, NPDES NO. CAS000002) is effective September 1, 2023, and expires August 31, 2028.

Water Quality Control Plan for the San Francisco Bay Region

The Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term “water quality standards,” as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards. The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region’s ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

State Water Resources Control Board Storm Water Strategy

The Storm Water Strategy is founded on the results of the Storm Water Strategic Initiative, which served to direct the State Water Board’s role in storm water resources management and evolve the Storm Water Program by a) developing guiding principles to serve as the foundation of the storm water program; b) identifying issues that support or inhibit the program from aligning with the guiding principles; and c) proposing and prioritizing projects that the Water Board could implement to address those issues. The State Water Board staff created a strategy-based document called the Strategy to Optimize Management of Storm Water (STORMS). STORMS includes a program vision, missions, goals, objectives, projects, timelines, and consideration of the most effective integration of project outcomes into the Water Board’s Storm Water Program.

Bay Area Stormwater Management Agencies, Start at the Source: Design Guidance Manual for Stormwater Quality Protection

This document is intended for use in the planning and design phases of residential, commercial, institutional, and industrial development and redevelopment. It recognizes that one of the best opportunities to reduce the generation of urban runoff or “nonpoint source pollution” from development is through planning and design. This document provides BMPs, including principles

and techniques for basic siting and design considerations, construction phase strategies, and post construction property management practices.

Contra Costa Clean Water Program

To comply with the Federal Clean Water Act, Contra Costa County, its 19 incorporated Cities, and the Contra Costa County Flood Control & Water Conservation District have joined together to form the Contra Costa Clean Water Program. The Contra Costa Clean Water Program strives to eliminate stormwater pollution through public education, inspection and enforcement activities, and industrial outreach.[2] The Contra Costa Clean Water Program is dedicated to maintaining a healthy environment in Contra Costa's creeks, rivers, the Delta, and the Bay.

Contra Costa Clean Water Program Stormwater C.3 Guidebook

The 9th Edition of the Contra Costa Clean Water Program Stormwater C.3 Guidebook aims to ensure that applicable projects meet local requirements for Low Impact Development (LID) drainage design and comply with the C.3 requirements in the California RWQCB Municipal Stormwater Regional Permit.[3] The Guidebook provides detailed information about how to prepare a Stormwater Control Plan as well as threshold and requirements for different regulated and non-regulated projects. Regulated projects include: a) one single-family home, not part of a larger plan of development, creating or replacing 10,000 square feet of impervious surface; b) all other projects creating or replacing between 5,000 square feet and one acre of impervious surface (10,000 square feet for projects approved before July 1, 2023); or c) projects creating or replacing an acre or more of impervious surface, unless exempted. Non-regulated projects include: a) projects requiring municipal approvals or permits (including single-family residences); or b) projects creating or replacing more than 2,500 to 5,000 square feet of impervious surface that are not regulated projects.

Contra Costa Watersheds Stormwater Resource Plan

The Contra Costa Watersheds Stormwater Resource Plan was created to help build stormwater management projects and programs within Contra Costa County. The plan builds upon a foundation of support for and successful implementation of watershed protection programs, restoration projects, and LID throughout the County. To reflect differences in watersheds across the County, and to incorporate community and creek-specific values into the planning process, the Stormwater Resource Plan organizes the County into five watershed-based Planning Units: the East County, Central County, North County, South County, and West County Planning Units.[4] The Stormwater Resource Plan forms the foundation for water quality improvement strategies as the Municipal Regional Permit requires permittees to develop and implement green infrastructure plans and demonstrate that required polychlorinated biphenyls and mercury load reductions will be achieved by the Total Maximum Daily Loads (TMDLs) deadlines.

Local

City of Martinez Clean Water Program

The City of Martinez Clean Water Program serves to radically reduce or eliminate pollutants from entering the municipal storm drain system. This program is mandated under the 1987

[2] California State Water Resources Control Board, Planning and Design, Watershed and Groundwater Protection, https://www.waterboards.ca.gov/water_issues/programs/nps/encyclopedia/3_1a_plandes_wtrsdgrdwtr_protect.html, accessed May 15, 2024.

[3] Contra Costa Clean Water Program, Stormwater C.3 Guidebook, Stormwater Quality Requirements for Development Applications, 9th Edition, April 12, 2024.

[4] Contra Costa Clean Water Program, Contra Costa Watersheds Stormwater Resource Plan, November 2019.

Amendments to the Federal Water Pollution Control Act or the Clean Water Act. Through BMPs, the City conducts municipal maintenance (e.g., street sweeping and catch basin cleaning), public education and outreach, new development and construction controls, illicit discharge control activities, monitoring and special studies, and watershed management activities.

City of Martinez Municipal Code, Title 15, Buildings and Construction

Title 15, Buildings and Construction, of the City of Martinez Municipal Code (Municipal Code) adopts various codes with modifications, including, but not limited to, the California Building Code, Residential Code, Green Building Standards Code, and Plumbing Code. Section 15.04.060, Erosion Control, provides erosion control measures and minimum standards and procedures to protect the public interest by managing construction practice of land excavation, fill, storage and grading.

City of Martinez Municipal Code, Chapter 15.06, Stormwater Management and Discharge Control

Municipal Code Chapter 15.06, Stormwater Management and Discharge Control, is the City's stormwater/urban runoff management and discharge controls ordinance. Its purpose is to protect and enhance the water quality in the City of Martinez's watercourses pursuant to, and consistent with the Porter Cologne Water Quality Control Act (Water Code Section 13000 et seq.) and the Federal Clean Water Act. It also carries out the conditions in the City's NPDES permit that require implementation of appropriate source control and site design measures and stormwater treatment measures for development projects. Every application for a development project, including but not limited to a rezoning, tentative map, parcel map, conditional use permit, variance, site development permit, design review, or building permit that is subject to the development runoff requirements in the City's NPDES permit must be accompanied by a stormwater control plan that meets the criteria in the most recent version of the Contra Costa Clean Water Program Stormwater C.3 Guidebook.

City of Martinez Municipal Code, Chapter 15.30, Floodplain Ordinance

Municipal Code Chapter 15.30, Floodplain Ordinance, provides development permit requirements and flood hazard reduction provisions for construction, utilities, and other types of developments. The ordinance was further updated in July 2015 to reflect FEMA's required revisions and provides additional clarifications to assist residents and City staff to administer the floodplain management measures. It is based on the California Model Floodplain Management Ordinance for Coastal Communities developed in 2006 by the State Department of Water Resources to meet the minimum requirements of the National Flood Insurance Program. In addition, it will allow for adaptation of future Flood Insurance Studies and FIRM's for the community.

3.8.2 Environmental Setting

Surface Water Hydrology

Regional

The San Francisco Bay Hydrologic Region covers approximately 2.88 million acres and includes all of San Francisco and portions of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda Counties. The region corresponds to the boundary of the San Francisco Bay Regional Water Quality Control Board. Within the San Francisco Bay Hydrology Region, the City is located within the western part of Suisun Bay Hydrologic Unit. The Suisun Bay watershed, which is characterized by generally treeless rolling hills with higher elevations ranging

between 100 and 272 feet above mean sea level and near the Sacramento and San Joaquin River delta to the east.[5]

Local

The City of Martinez is located just south of the Carquinez Strait, which opens to the San Pablo Bay. Approximately 7 miles to the east of Martinez is the confluence of the Sacramento and San Joaquin Rivers that support the State's water supply. Surface water from the two drainage basins meet and form the Delta, which ultimately drains to San Francisco Bay. The Delta is a maze of river channels and diked islands covering roughly 1,150 square miles, including 78 square miles of water area. The legal boundary of the Delta, according to Water Code Section 12220, is located roughly seven miles west of Martinez.[6] The City is situated within portions of three hydrologic areas, including the Mount Diablo Creek–Frontal Suisun Bay Estuaries, Walnut Creek–Frontal Suisun Bay Estuaries, and the Suisun Bay.[7] The project site is located within portions of the Mount Diablo Creek–Frontal Suisun Bay Estuaries and Suisun Bay hydrologic areas.

On-Site Drainage

As described in the Stormwater Report (Appendix G), the project site is currently divided into three existing drainage areas (refer to Exhibit A2 in Appendix G):

- Drainage Area 1 (1.85 acres): North of the existing UPRR main track and east of Waterfront Road overpass. This area drains from north to south until the runoff is collected at the toe of the existing UPRR trackbed, then drains from west to east along the toe of the trackbed into an existing ponding area (Pond-1).
- Drainage Area 2 (0.33 acre): North of the existing UPRR main track and west of Waterfront Road overpass. This area drains from north to south until the runoff is collected at the toe of the existing UPRR trackbed, then drains from east to west along the toe of the trackbed into an existing ponding area (Pond-2).
- Drainage Area 3 (2.33 acres): This drainage area consists of the existing unused rail spur area and an existing TransMontaigne operating area. This area drains from north to south across the operating area, then crosses the existing fence and enters the existing rail spur area. The runoff then is combined with that originated from the existing rail spur area and continues to drain from north to south into Pond-2.

For Pond 1, the total runoff from Drainage Area 1 is 0.61 acre-feet, and the peak discharge is 1.81 cubic feet per second.

For Pond 2, the total runoff from Drainage Areas 2 and 3 is 1.00 acre-feet, and the peak discharge is 3.13 cubic feet per second.

The total existing runoff from a 2-year, 24-hour storm is 0.47 acre-feet. The total existing runoff from a 50-year, 24-hour storm is 1.39 acre-feet. The total existing runoff from a 100-year, 24-hour storm is 1.62 acre-feet.

[5] City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022.

[6] City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022.

[7] City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022, Figure 4.9-1, Watershed Map.

Surface Water Quality

Many waters bodies in the County have impaired water quality or are tributary to impaired waters such as the San Francisco Bay and the Sacramento-San Joaquin Delta and are subject to TMDLs for pollutants. Based on the SWRCB's list of impaired waters, the Mt. Diablo Creek, which is approximately 2.9 miles from the project site, is listed to have the following pollutants: diazinon pesticides and toxicity. Suisun Bay is listed to have the have the following pollutants: pesticides (chlordane, DDT, and dieldrin); toxic organics (dioxin compounds, furan compounds, and polychlorinated biphenyls); metals (mercury and selenium).[8]

Groundwater Hydrology and Quality

The City of Martinez currently has no active groundwater well sources. All of the City's raw water supply is from surface water provided by the Contra Costa Water District's Contra Costa Canal. The City has no major groundwater production facilities for water supply, and there are no major groundwater basins underlying the City. The City's nearest significant groundwater basin is the Ygnacio Valley Groundwater Basin.[9]

The eastern portion of the project site is located within the Ygnacio Valley Groundwater Basin (Basin No. 2-6), which is approximately 15,469 acres (24.2 square miles) and bounded by Suisan Bay to the North, Interstate 680 to the west, the Concord Fault to the east, and the City of Walnut Creek to the south.[10,11] Natural infiltration and seepage of precipitation is the primary source for aquifer recharge in this basin. Groundwater accounts for only 4 percent of the Ygnacio Valley Groundwater Basin's water supply, totaling 778 acre-feet per year.[12] Groundwater use is minimal in the basin. Limited information on groundwater quality is available for the basin. As the most current SMGA Basin Prioritization identifies the basin as a very low priority basin, a groundwater sustainability agency is not required to be formed and a groundwater sustainability plan is not required to be adopted.[13]

On-Site

As described in the Geotechnical Investigation prepared for the project (Appendix E of this Draft EIR), the western portion of the project site consists of Bay Mud deposits and Panoche Formation clay shale/claystone; the central portion of the project site consists of Panoche Formation clay shale/claystone and sandstone; and the eastern portion of the project site consists of Bay Mud deposits. As discussed in the Geotechnical Investigation, while groundwater was not encountered in the field exploration borings, testing at the site indicated that groundwater could be present at depths of approximately 2 to 4 feet in the areas containing Bay Mud deposits (refer to Figure 3 in Appendix E). Actual groundwater levels fluctuate seasonally and with variations in rainfall, reservoir water level, temperature, and other factors and may be higher or lower than what was

8 State Water Resources Control Board, Final Appendix I: 2022-2022 303(d) List of Impaired Waters, https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html, accessed April 22, 2024.

9 City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022.

10 City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022.

11 Sustainable Groundwater Management Act Data Viewer, https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#boundaries, accessed April 25, 2024.

12 California State Water Resources Control Board, San Francisco Bay Hydrologic Region, Clayton Ygnacio, and Arroyo del Hambre Valley Groundwater Subbasins (2-5, 2-6, and 2-31), last updated September 14, 2021.

13 California State Water Resources Control Board, Sustainable Groundwater Management Act 2019 Basin Prioritization, May 2020.

observed during the field exploration. Shallow groundwater conditions are anticipated, especially within areas of Bay Mud deposits.

As described in Section 3.7, Hazards and Hazardous Materials, of this Draft EIR, the following Recognized Environmental Conditions (RECs) are associated with groundwater quality:

- Tosco Pipeline – Wickland Releases (GeoTracker ID SL18360780)[14]

  At least seven historical releases of total petroleum hydrocarbons (TPH) occurred within the pipeline alignment adjacent to the south of the wetland. Residual TPH constituents may be found in the wetland. Contaminant maps provided in the most recent cleanup order (Order R2-2008-0019) show that the contaminant plume was located within the wetland. The cleanup case related to these releases is eligible for case closure as of November 2017; however, until the case is closed, these releases are classified as a REC. Once this case is closed, this REC may be reclassified as a Historical Recognized Environmental Condition (HREC).

- TransMontaigne Martinez – Refinery Release (GeoTracker ID SL373211178)[15]

  Numerous releases have occurred in connection with refinery operations at the TransMontaigne Martinez Terminal. Extensive remedial actions have been implemented to achieve cleanup objectives. Most notably, in the southwestern area of the terminal (the western portion of the project area), a phytoremediation system was installed in 2007 to contain dissolved-phase hydrocarbons and methyl tertiary butyl ether (MTBE) and limit potential discharges to the marsh. A groundwater extraction pump was also installed in a monitoring well in this region to contain groundwater while the roots of the phytoremediation system deepened. Residual contamination is managed through the land use covenant (LUC), described further below, and Soil Management Plan (SMP). The SMP, dated June 17, 2019, provides procedures and protocols for managing residual hydrocarbons in soil throughout the facility. The case for this facility is eligible for closure related to petroleum contamination as of July 19, 2021.

- TransMontaigne Martinez Terminal – PFAS (GeoTracker ID L10005962342)[16]

  While the TransMontaigne facility is eligible for closure pertaining to TPH contamination, recent investigations have been conducted to evaluate the presence of per- and polyfluoroalkyl substances (PFAS) in groundwater, under open cleanup case L10005962342. The case is listed to have long-term management (as of July 19, 2021). The PFAS investigation is outside the scope of the Phase I ESA. On December 20, 2023, the San Francisco Bay Regional Water Quality Control Board approved TransMontaigne

[14] California State Water Resources Control Board, GeoTracker, Tosco Pipeline – Wickland (SL18360780), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL18360780, accessed April 17, 2024.

[15] California State Water Resources Control Board, GeoTracker, TransMontaigne Martinez (SL373211178), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL373211178, accessed April 17, 2024.

[16] California State Water Resources Control Board, GeoTracker, TransMontaigne Martinez Terminal PFAS (L10005962342), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=L10005962342, accessed April 17, 2024.

Martinez Terminal's work plan for further investigation of PFAS contamination in groundwater.[17]

The following Controlled REC is associated with groundwater quality:

- A Covenant and Environmental Restriction was recorded on March 12, 2020, (with the GeoTracker entry dated August 16, 2023) and affects the entire TransMontaigne parcel (APN 159-310-038).[18] The covenant indicates that soil and groundwater underlying the property contain hazardous materials (TPH) due to historical releases from refinery operations. The LUC references the 2019 SMP prepared by Apex, which summarizes procedures for the appropriate management of separate phase hydrocarbons (SPH) and associated petroleum-impacted soil and groundwater during future redevelopment or other on-site maintenance activities at the site.

Flood Hazards

As defined by FEMA, areas categorized as Zone AE are high-risk areas (also known as special flood hazard areas), which have at least a 1% annual chance of flooding. Areas categorized as Zone X are areas outside the 0.2 percent annual chance floodplain and have relatively lower flood hazard risk. In addition, FEMA defines "Base Flood Elevation" as the elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.[19]

According to the Stormwater Report and FEMA FIRM maps, the location where the proposed industry track ties in to the UPRR main track is within Zone AE (special flood hazard areas) with a Base Flood Elevation of 10 feet. The proposed industry track then transitions to Zone X (Areas Determined to be Outside the 0.2% Annual Chance Floodplain). Shortly after crossing under the Waterfront Road overpass, the industry track is located near the boundary between Zone X and Zone AE, with a Base Flood Elevation of 9 feet.[20]

Seiches and Tsunamis

Seiches are seismically or wind induced tidal phenomena that occur in enclosed bodies of water. Seismic seiches occur when seismic waves from an earthquake pass through the area. Wind induced seiches are waves caused by strong winds and rapid changes in atmospheric pressure pushing water from one end to another within a body of water. When the wind stops, the water bounces back to the other side of the enclosed area and continues to oscillate back and forth.

Tsunamis are large ocean waves which are generated by major seismic events with the potential of causing flooding in low lying coastal areas. The City's waterfront area is at risk of inundation from tsunamis that could be generated in the open ocean, San Francisco Bay, or Carquinez Strait. Proximity to the Carquinez Strait and Suisun Bay, which is a semi-confined water body, may pose significant risk from a seiche. The City has stated that areas designated for industrial uses in

[17] San Francisco Bay Regional Water Quality Control Board, Approval of Work Plan for PFAS Investigation – Round 3 and Request for Completion Report, TransMontaigne- Martinez Terminal, available at: https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/5578794181/PFAS_20231220_mt.pdf, accessed April 17, 2024.

[18] California State Water Resources Control Board, GeoTracker, TransMontaigne Martinez (SL373211178), available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL373211178, accessed April 17, 2024.

[19] Federal Emergency Management Agency, How to Read a Flood Map, January 2022.

[20] Federal Emergency Management Agency, Flood Insurance Rate Maps, Panel Numbers 06013C0088H and 06013C0089H, effective March 20, 2017.

these locales would generally pose the greatest potential risk for pollution release during a tsunami and seiche events.[21]

3.8.3 Methodology

The analysis of surface water quality impacts identifies the types of pollutants associated with construction and operation of the project and considers their potential effects on surface water quality as well as implementation of BMPs.

The analysis of surface water hydrology evaluates the change in surface water runoff patterns and quantity for the project site due to the construction and operation of the project and the impact of these changes on the existing stormwater system. As discussed in the Regulatory Framework Section above, the City has adopted the Contra Costa Clean Water Program Stormwater C.3 Guidebook as its basis of a Stormwater Control Plan and design for storm drainage facilities. The Soil Conservation Service (SCS) Curve Number Method is used to calculate the total runoff and peak outflow for both existing and proposed conditions, which is computed in the U.S. Army Corps of Engineer's Hydrologic Engineering Center Hydrologic Modeling System (HEC-HMS) software to generate hydrologic calculations and to model the rainfall-runoff losses.

The analysis of the project's potential impacts associated with groundwater is based on a review of existing groundwater conditions and groundwater uses and an evaluation of the potential impacts for construction and operation of the project to affect those uses and groundwater quality. Construction and operational activities evaluated include any potential dewatering, during construction; potential for changes in groundwater recharge; infiltration capacity of the underlying soil; permanent dewatering; potential soil or shallow groundwater exposure to construction materials, wastes, or spilled materials, handling and storage of hazardous materials; and/or any potential groundwater remediation activities.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to hydrology and water quality are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site;
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

[21] City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022.

  - Impede or redirect flood flows;
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or

- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The Appendix G significance criteria noted below were scoped out of the analysis for further consideration in the Initial Study (Appendix A), and are discussed in Chapter 4, Other CEQA Considerations, of this Draft EIR.

- Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

3.8.4 Impact Analysis

HWQ-1 Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction

Surface Water Quality

During project construction, particularly during the excavation and grading phases, stormwater runoff from precipitation events could cause exposed and stockpiled soils to be subject to erosion and convey sediments into municipal storm drain systems. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff. Pollutant discharges relating to the storage, handling, use and disposal of chemicals, adhesives, coatings, and fuel could also occur. However, as project construction would disturb more than one acre of soil, the project would be required to obtain coverage under the NPDES Construction General Permit. In accordance with the requirements of the NPDES Construction General Permit, and as set forth in Municipal Code Section 15.06.090.I, the project would prepare and implement a site-specific SWPPP adhering to the California Stormwater Quality Association BMP Handbook. The SWPPP would specify BMPs to be used during construction to manage stormwater and non-stormwater discharges. BMPs would include, but not be limited to, erosion control, sediment control, non-stormwater management, and materials management BMPs, which would reduce or eliminate the discharge of potential pollutants from stormwater runoff. In addition, project construction activities would occur in accordance with City grading permit regulations (Municipal Code Sections 15.04.050 and 15.040.060), such as the preparation of an erosion control plan, to reduce the effects of sedimentation and erosion.

With the implementation of site-specific BMPs included as part of the SWPPP and implementation of an erosion control plan as required by the Municipal Code, the proposed project would reduce or eliminate the discharge of potential pollutants from stormwater runoff. In addition, the proposed project would be required to comply with City grading permit regulations and inspections to reduce sedimentation and erosion. Therefore, based on the above, with compliance with NPDES requirements and City code and grading permit regulations, construction of the project would not result in discharge that would violate any water quality standard or waste discharge requirements or otherwise substantially degrade surface water quality. Thus, temporary construction-related impacts to surface water quality would be less than significant.

Groundwater Quality

Most of the hazardous waste generated by the proposed project would consist of fuel and oils associated with construction equipment, as well as liquid waste, including coatings, adhesives, cleaning fluids, and solvents. Some solid hazardous waste, such as welding materials, may also be generated during construction. The management of any resultant hazardous wastes could increase the potential for hazardous materials to be released into groundwater. As described in Section 3.7, Hazards and Hazardous Materials, of this Draft EIR, compliance with all applicable federal, state, and local requirements concerning the handling, storage and disposal of hazardous waste, would reduce the potential for the construction of the proposed project to release contaminants into groundwater that could affect existing contaminants, expand the area or increase the level of groundwater contamination, or cause a violation of regulatory water quality standards.

As discussed in Chapter 2, Project Description, of this Draft EIR, the maximum depth of construction related excavation would be approximately 16 feet below the ground surface, and the average excavation depths for track areas would be 5 feet below the ground surface. Excavation would occur predominately along the central portion of the project site, which is underlain by Panoche Formation clay shale/claystone and sandstone, and along the western portions of the project site, which is underlain by Bay Mud deposits. Based on the Geotechnical Investigation prepared for the proposed project, shallow groundwater conditions would be anticipated, especially within areas of Bay Mud deposits. As previously described, testing at the site indicated that groundwater could occur at depths of approximately 2 to 4 feet in Bay Mud deposits. Nonetheless, actual groundwater levels fluctuate seasonally and with variations in rainfall, reservoir water level, temperature, and other factors and may be higher or lower than what was observed during the field exploration. As such, the proposed project would be expected to require temporary dewatering in portions of the project site during construction. Dewatering operations are practices that discharge non-stormwater, such as groundwater, that must be removed from a work location to proceed with construction. Discharges from dewatering operations can contain high levels of fine sediments, which if not properly treated, could lead to exceedance of the NPDES requirements. Dewatering provisions would be incorporated in the project's SWPPP and the temporary dewatering system would be utilized in compliance with the NPDES Construction Stormwater General Permit and its Attachment J, Dewatering Requirements.[22]

With adherence to existing regulations and permitting requirements, construction of the proposed project would not result in discharge that would violate any groundwater quality standard or waste discharge requirements or otherwise substantially degrade groundwater quality. Therefore, construction-related impacts on groundwater quality would be less than significant.

Operation

Surface Water Quality

As described in Chapter 2, Project Description, the reestablished rail spur would be used to bring train cars to the Martinez Terminal property for transfer of contents to and from the above-ground storage tanks. Transported goods would include a range of petroleum-based and renewable products, feed stocks, and blend stocks commodities. Under existing conditions, the Martinez

[22] California State Water Resources Control Board, National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance (General Permit), ORDER WQ 2022-0057-DWQ, NPDES No. CAS000002, Attachment J, Dewatering Requirements, effective September 1, 2023.

Terminal property is already developed with pipelines, storage tanks, office space, and related facilities associated with its operation as a storage and transportation hub for petroleum and renewable products and related feed and blend stocks. As described in Section 3.7, Hazards and Hazardous Materials, the existing emergency response plan and spill prevention plan that covers the Martinez Terminal would be updated to include the project site and operations associated with the proposed project. As part of the emergency response plan and spill prevention plan, project personnel would have available adequate spill containment and cleanup resources on-site at all times and be prepared to contain, control, clean up, and dispose of any potential fuel spill quickly and completely. In addition, as discussed in the Stormwater Report, the project would construct new ditches, culverts and underdrains. While portions of drainage and runoff would continue to enter an existing ponding area (Pond-1), similar to existing conditions, the proposed project would eliminate drainage and runoff to existing Pond-2. The remaining portions of drainage and runoff from the project site would instead drain into a proposed sump that would be located at the southern end of the operating industry tracks within the Martinez Terminal property. The sump would be maintained (pumped) by the Project Applicant. As calculated in the Stormwater Report, all proposed pipes, underdrains, and ditches would have adequate capacity to accommodate 100-year, 24-hour storm flows. As of the writing of this Draft EIR, the Project Applicant has submitted an application for Section 401 Water Quality Certification, for which the RWQCB has provided a draft of the Water Quality Certification. The Project Applicant would be required to submit the stormwater management plan for review. Upon approval by the RWQCB and implementation of the proposed stormwater drainage system, project operation would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface water quality. Therefore, with adherence to existing regulations and permitting requirements, operational impacts related to surface water quality would be less than significant.

Groundwater Quality

The proposed project would not include the installation or operation of water wells, or any groundwater extraction or recharge system. In addition, operation of the project would not involve the use of underground storage tanks. The proposed project would comply with all applicable existing regulations at the project site regarding the handling and any required cleanup of hazardous materials, as applicable. As such, regulatory compliance would prevent the proposed project from affecting or expanding any potential areas of contamination or causing a violation of regulatory water quality standards. Project operations would not exacerbate the existing RECs linked to the Tosco Pipeline releases (GeoTracker ID SL18360780) and the TransMontaigne Martinez Terminal releases (GeoTracker ID SL373211178) concerning petroleum contamination in groundwater. In addition, the proposed project would not preclude or interfere with the continued work plan and investigation of PFAS contamination in groundwater associated with the TransMontaigne Martinez Terminal – PFAS (GeoTracker ID L10005962342) REC. The proposed project would also not conflict with the existing LUC that has been recorded for the entire TransMontaigne parcel (APN 159-310-038), which references a 2019 SMP for appropriate management of separate phase hydrocarbons (SPH) and associated petroleum-impacted soil and groundwater during future redevelopment or other on-site maintenance activities at the site.

Thus, the proposed project is not anticipated to result in releases or spills of contaminants that could reach a groundwater recharge area or spreading ground or otherwise reach groundwater through percolation. Therefore, operation of the proposed project would not result in discharges that would violate any groundwater quality standard or waste discharge requirements or otherwise substantially degrade groundwater quality. The potential impact on groundwater quality during operation of the proposed project would be less than significant.

HWQ-2 Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction

As discussed in Chapter 2, Project Description, of this Draft EIR, site preparation activities would include excavation and grading of existing soil with approximately 16,000 cubic yards of soil to be excavated from the project site. The maximum depth of construction related excavation would be approximately 16 feet below the ground surface, with average excavation depths for track areas of 5 feet below the ground surface. Approximately 2,100 cubic yards of excavated soils would be used as fill material to prepare the site for placement of the tracks. Soils would then be compacted using graders, trucks, and compactors in preparation of installing the new track. The remaining excavated materials would be placed within the Martinez Terminal property. As such, these construction activities would have the potential to temporarily alter existing drainage patterns and flows on the project site by exposing the underlying soils and modifying flow direction. Exposed and stockpiled soils could be subject to erosion and conveyance into nearby drains during storm events. In addition, on-site watering activities used to reduce airborne dust could contribute to pollutant loading in runoff.

As discussed above, because construction activities would occur over an area greater than one acre, the project would be required to obtain coverage under the NPDES Construction General Permit. In accordance with the permit requirements, the proposed project would implement a SWPPP that specifies BMPs and erosion control measures to manage runoff flows and include dewatering provisions during construction. These BMPs would be designed to contain stormwater or construction watering on the project site such that runoff will not impact off-site drainage facilities or receiving waters. An erosion control plan, prepared and implemented in accordance with City grading permit regulations (Municipal Code Section 15.04.060), would require that stormwater or construction watering be contained and treated on-site so that runoff does not result in substantial pollution or impact off-site drainage facilities or receiving water. As such, flow directions and runoff volumes during temporary construction activities would be controlled.

Thus, with compliance with NPDES Construction General Permit requirements, including implementation of a SWPPP and construction BMPs, as well as compliance with applicable City grading permit regulations, project construction would not substantially alter the existing drainage pattern of the project site in a manner that would result in substantial erosion, siltation, or flooding on- or off-site. In addition, construction of the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. As such, construction-related impacts to erosion, siltation, and surface water hydrology would be less than significant.

Operation

As previously discussed, under existing conditions, Drainage Area 1 consists of approximately 1.85 acres and drains into existing Pond-1. Existing Drainage Areas 2 and 3 consist of approximately 2.66 acres and drain into existing Pond-2. During project operation, runoff from the proposed lead and operating tracks would be collected by pipes and drains and routed to one of three locations, including an existing ponding area, a proposed new sump, or the proposed secondary containment system, which would ultimately drain to the new sump. Drainage pipes would be installed as part of the pier protection beneath the Waterfront Road overcrossing and within the retaining walls to be installed on either side of the operating industry tracks in the northwestern portion of the project site. Both the proposed secondary containment system and the new sump would be installed within the Martinez Terminal property at the southern end of the operating industry tracks. During operation, the project site would be divided into five drainage areas as described below (refer to Exhibit A3 in Appendix G):

- Drainage Area 1 (0.42 acre): This area would drain from south to north and enter existing Pond-1. The trackbed of the proposed industry lead would be designed in a way not to obstruct runoff from the existing UPRR track from entering Pond-1.
- Drainage Area 2 (1.42 acres): Runoff from the existing UPRR track and the proposed industry lead would flow from south to north and enter proposed Ditch-1. The trackbed of the proposed industry lead would be designed in a way not to obstruct runoff from the existing UPRR track from entering Ditch-1. Runoff from north of the proposed industry lead would flow from north to south and also enter Ditch-1. Ditch-1 would drain to existing ponding area Pond-1.
- Drainage Area 3 (1.32 acres): Runoff from the existing UPRR track and the proposed industry lead would flow from south to north and enter proposed pipe SD-1. The trackbed of the proposed industry lead would be designed in a way not to obstruct runoff from the existing UPRR track from entering SD-1. Runoff from north of the proposed industry lead would flow from north to south and enter the drainage system constructed behind the face of the proposed retaining wall, then also enter SD-1 at the base of the retaining wall. SD-1 would drain to proposed Sump-1 and would be maintained by the Project Applicant.
- Drainage Area 4 (0.78 acre): This drainage area represents the proposed unloading area. Runoff from this area (Drainage Areas 4-1 and 4-2) would enter two proposed underdrains UD-1 and UD-2, flow from west to east, and enter proposed pipe SD-2. Some of the runoff would not enter the underdrains but the proposed secondary containment area, which once cleared of any spill, would also flow into SD-2. SD-2 would drain to proposed Sump-1 and would be maintained by the Project Applicant.
- Drainage Area 5 (0.58 acre): This drainage area represents the portion of the project site within the existing Martinez Terminal operating area in the northwest portion of the project site. Runoff from this area would be intercepted and flow along the base of the proposed retaining wall and enter proposed Sump-1.

With implementation of the proposed project, portions of site runoff and discharge would continue to enter existing Pond-1; however, the project would eliminate drainage and runoff to existing Pond-2.

As shown in Table 3.8-1, the total runoff to Pond-1 from proposed Drainage Areas 1 and 2 would increase by 2.67 percent,[23] and the total peak discharge to Pond-1 from proposed Drainage Areas 1 and 2 would increase by 7.86 percent.[24] Such increases would not be considered significant for Pond-1.

During operation of the proposed project, other remaining portions of drainage and runoff from the project site would drain into proposed Sump-1, which would be located within the existing Martinez Terminal operating area in the northwest portion of the project site. As shown in Table 3.8-2, all proposed pipes, underdrains, and ditches would have adequate capacity to accommodate 100-year, 24-hour storm flows.

Table 3.8-1: Comparison of Ponding Areas under Existing and Proposed Conditions

Ponding Area	Existing	Proposed	Existing		Proposed	
	Tributary Areas	Tributary Areas	Total Runoff (af)	Peak Discharge (cfs)	Total Runoff (af)	Peak Discharge (cfs)
Pond-1	DA 1	DA 1, DA 2	0.61441	1.80800	0.63082	1.95006
Pond-2	DA 2, DA 3	None	1.00139	3.12619	0	0

DA = drainage area
af = acre-feet
cfs = cubic feet per second
Source: JMA Civil, Inc., Stormwater Report, February 2024. See Appendix G of this Draft EIR.

Table 3.8-2: Capacity of Proposed Infrastructure

Proposed Infrastructure	Proposed Tributary Areas	Peak Flow of 100-year storm (cfs) $Q_{REQUIRED}$	Capacity (cfs) $Q_{CAPACITY}$	$Q_{CAPACITY} > Q_{REQUIRED}$
Ditch 1	DA-2	1.47	65.05	Yes
Pipe SD-1	DA-3	1.40	2.01	Yes
Underdrain UD-1	DA-4-1	0.46	0.52	Yes
Underdrain UD-2	DA-4-2	0.46	0.52	Yes
Pipe SD-2	DA-3, DA-4	2.32	2.73	Yes

DA = drainage area
cfs = cubic feet per second
$Q_{REQUIRED}$ = Peak flow for a 100-year, 24-hour storm event occurring on the proposed tributary area. A 100-year storm is a rainfall event that has a 1% chance of occurring in a particular location in any given year.
$Q_{CAPACITY}$ = Flow capacity of the proposed infrastructure for the proposed tributary area.
Source: JMA Civil, Inc., Stormwater Report, February 2024. See Appendix G of this Draft EIR.

Based on the above, runoff from the project site would either be routed to existing drainage facilities or to proposed new drainage facilities and contained onsite. As such, operation of the project would not substantially alter the existing drainage pattern of the project site in a manner that would result in substantial erosion, siltation, surface runoff on- or off-site. Additionally, as discussed in the analysis under Threshold HWQ-3, the proposed project would not result in substantial changes in the amount of impervious surfaces at the site. Thus, the rate and amount

[23] [(0.63082 – 0.61441) ÷ 0.61441] × 100 = 2.67 percent
[24] [(1.95006 – 1.80800) ÷ 1.80800] × 100 = 7.86 percent

of runoff would not result in flooding on- or off-site. Furthermore, the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. As such, operational impacts to surface water hydrology would be less than significant.

HWQ-3 Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

iv. Impede or redirect flood flows?

As described in Section 3.8.2, based on FEMA FIRM maps, portions of the project site are located within high-risk, special flood hazard areas and areas that have relatively lower flood hazard risk.[25] As discussed, project runoff would ultimately drain to existing Pond-1 and proposed Sump-1. Railroad tracks are underlain by pervious materials to maintain track support and proper drainage. The new lead track located in the portion of the project site within the UPRR ROW would include similar substrate as existing conditions and would not change the amount of impervious surfaces present. Similarly, the proposed operating industry tracks within the Martinez Terminal property would include pervious materials to facilitate proper drainage. The trackbed of the proposed industry lead would also be designed in a way not to obstruct runoff from the existing UPRR track from entering existing Pond-1. While total runoff and total peak discharge to existing Pond-1 from proposed Drainage Areas 1 and 2 would increase by 2.67 percent and 7.86 percent, respectively, such increases would not be considered significant for Pond-1. Additionally, the proposed retaining walls would be designed and constructed in accordance with the recommendations provided in the Geotechnical Investigation pursuant to Municipal Code Chapter 15.04, including providing an adequate drainage system and waterproofing. Furthermore, the capacities of the proposed ditches, culverts, and underdrains would be sufficient to accommodate 100-year, 24-hour storm flows. Similar to existing conditions, Pond-1 would continue to be maintained by the Project Applicant during project operation. Furthermore, proposed Sump-1 would be maintained by the Project Applicant. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner which would impede or redirect flood flows, and impacts would be less than significant.

HWQ-4 Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

As described above in Section 3.8.2, based on FEMA FIRM maps, portions of the project site are located within high-risk, special flood hazard areas and areas that have relatively lower flood hazard risk.[26] Based on the City's Safety Element, the western portion of the project site is also located in the Martinez Reservoir Potential Inundation Area.[27] Dam safety regulations are the primary means of reducing damage or injury due to inundation occurring from dam failure. The California Division of Safety of Dams regulates the siting, design, construction, and periodic review of all dams in the State. In addition, the Contra Costa Water District's Dam Safety Program ensures that its dams and levees operate safely in accordance with all State and federal regulations by working with regulatory agencies such as the United States Bureau of Reclamation, which includes the Martinez Dam in its jurisdiction. The Dam Safety Program includes testing of dam monitoring equipment, regular use of emergency equipment, and annual review of em

[25] Federal Emergency Management Agency, Flood Insurance Rate Maps, Panel Numbers 06013C0088H and 06013C0089H, effective March 20, 2017.

[26] Federal Emergency Management Agency, Flood Insurance Rate Maps, Panel Numbers 06013C0088H and 06013C0089H, effective March 20, 2017.

[27] City of Martinez, Safety Element, Figure 8-7, Dam Failure Inundation Areas, 2022.

ergency plans. Each dam has a unique plan that provides dam condition assessment information and an outline of coordinated response procedures in the unlikely event of a dam emergency. Annual dam inspections by United States Bureau of Reclamation have confirmed that the dams, including the Martinez Dam, are well maintained and safe for continued use.[28] In addition, the City's waterfront area is at risk of inundation from tsunamis that could be generated in the open ocean, San Francisco Bay, or Carquinez Strait. Proximity to the Carquinez Strait and Suisun Bay, which is a semi-confined water body, may pose significant risk from a seiche. The City has stated that areas designated for industrial uses in these locales would generally pose the greatest potential risk for pollution release during a tsunami and seiche events.[29] Under existing conditions, the Martinez Terminal property is already developed with pipelines, storage tanks, office space, and related facilities associated with its operation as a storage and transportation hub for petroleum and renewable products and related feed and blend stocks. Implementation of the proposed project would not change the existing uses at the project site. In addition, as described in Section 3.7, Hazards and Hazardous Materials, the existing emergency response plan and spill prevention plan that covers the Martinez Terminal would be updated to include the project site and operations associated with the proposed project. Furthermore, the City's Hazard Mitigation Plan provides a list of existing programs, proposed activities, and specific projects that may assist the City in reducing risk and preventing loss of life and property damage from natural and human-caused hazards, including tsunamis and dam failure.[30] Therefore, with adherence to existing regulations, the project would not risk release of pollutants due to project inundation, and impacts would be less than significant.

HWQ-5 Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed above for Threshold HWQ-1, project construction could result in erosion of exposed and stockpiled soils, increased pollutant loading due to on-site watering activities, and pollutant discharges relating to the storage, handling, use and disposal of chemicals, adhesives, coatings, lubricants, and fuel. However, the proposed project would be required to obtain coverage under the NPDES Construction General Permit which requires implementation of a SWPPP, erosion control measures, and proper temporary dewatering activities. The BMPs included in the SWPPP could include sandbags, storm drain inlets protection, stabilized construction entrance/exit, wind erosion control, and stockpile management, to minimize the discharge of pollutants in stormwater runoff during construction. The SWPPP would be carried out in compliance with SWRCB requirements and would also be subject to review by the City. Project construction activities would occur in accordance with City grading permit regulations, such as the preparation of an erosion control plan, to reduce the effects of sedimentation and erosion. With compliance with these existing regulatory requirements that include specific BMPs to address surface water quality, impacts during construction would be less than significant.

As previously discussed, implementation of the proposed project would not change the existing uses at the project site. The types of products that would be stored on the proposed new industry operating tracks are consistent with products already handled, stored, and conveyed to and from the project site under existing conditions. As such, the project would not introduce new pollutants to the site. Furthermore, the Project Applicant has submitted an application for Section 401 Water Quality Certification, for which the RWQCB has provided a draft of the Water Quality Certification.

[28] Contra Costa Water District, Dam Safety Program, available at: https://www.ccwater.com/1051/Dam-Safety-Program, accessed April 29, 2024.

[29] City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022.

[30] Contra Costa County, 2024 Hazard Mitigation Plan, City of Martinez Annex, 2024.

The Project Applicant would be required to submit the project's stormwater management plan for review. Upon approval by the RWQCB and implementation of the proposed stormwater drainage system, project operation would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface water quality. As such, the proposed project would not introduce new pollutants or an increase in pollutants that could conflict with or obstruct any water quality control plans.

With respect to groundwater, the eastern portion of the project site is located within the Ygnacio Valley Groundwater Basin (Basin No. 2-6). As the most current SMGA Basin Prioritization identifies the basin as a very low priority basin, a groundwater sustainability agency is not required. Therefore, the proposed project would not conflict with a sustainable groundwater management plan.

Therefore, with compliance with existing regulatory requirements and implementation of BMPs, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

3.8.5 Mitigation Measures

No mitigation measures are required.

3.8.6 Level of Significance After Mitigation

Impacts would be less than significant.

3.8.7 Cumulative Impacts

Surface Water Hydrology and Quality

As discussed above, stormwater runoff from development has the potential to introduce pollutants into stormwater systems. As with the proposed project, the related projects would also implement SWPPP and BMP requirements, including the implementation of erosion control and measures to comply with TMDLs and target pollutants that could be carried in stormwater runoff. Furthermore, controls associated with other elements of NPDES permits would improve regional water quality over time. Additionally, with implementation of the project, the stormwater runoff drainage system with Pond-1 and Sump-1, which would be maintained and pumped by the Project Applicant, would ensure that surface water quality from the site would not be impaired by the project. The City would review each future development project on a case-by-case basis to ensure sufficient local and regional infrastructure is available to accommodate stormwater runoff. Therefore, with compliance with all applicable laws, rules and regulations, construction and operation of the project and related project would not result in significant cumulative impacts related to surface water hydrology and quality. As such, the proposed project's contribution would not be cumulatively considerable, and cumulative impacts to surface water hydrology and quality would be less than significant.

Groundwater Hydrology and Quality

The nearest related project, the Martinez Refinery Renewable Fuels Project, is located 1.2 miles east of the project site and is located within the Clayton Valley Groundwater Basin.[31] The Amare Apartments Homes related project is located 2.5 miles south of the project site and is located

[31] Sustainable Groundwater Management Act Data Viewer, https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#boundaries, accessed April 25, 2024.

directly adjacent to the Ygnacio Valley Groundwater Basin.[32] The Traditions at the Meadow related project is located 2.7 miles south of the project site and is not located within any groundwater basin.[33] With respect to groundwater, the eastern portion of the project site is located within the Ygnacio Valley Groundwater Basin (Basin No. 2-6). However, as described above, as the basin is a very low priority basin, a groundwater sustainability agency is not required to be formed, and a groundwater sustainability plan is not required to be adopted. In addition, the proposed project is not anticipated to result in releases or spills of contaminants that could reach a groundwater recharge area or spreading ground or otherwise reach groundwater through percolation. Based on their locations, the related projects would not interfere with groundwater recharge and quality of the Ygnacio Valley Groundwater Basin. Therefore, construction and operation of the project and related project would not result in significant cumulative impacts related to groundwater hydrology and water quality. The project's contribution would not be cumulatively considerable, and cumulative impacts would be less than significant.

Pollutants and Inundation

The Amare Apartments Homes and Traditions at the Meadow related projects are located at least 2.5 miles south of the project site and are located within Zone X, areas of minimal flood hazard, and are not located in a tsunami or seiche zone.[34,35] The Martinez Refinery Renewable Fuels related project is located 1.2 miles east of the project site and is located within Zone X, an area of minimal flood hazard, and outside the Lafayette Reservoir Potential Inundation Area.[36,37] As such, the related projects would not result in risk of release of pollutants due to inundation. While the project site is located in the Martinez Reservoir Potential Inundation Area and in proximity to the Carquinez Strait and Suisun Bay, the proposed project would not result in new types of materials handled, stored, and conveyed to and from the project site. Accordingly, the existing emergency response plan and spill prevention plan that covers the Martinez Terminal would be updated to include the project site and operations. Therefore, the proposed project and related projects would not result in significant cumulative impacts related to risk of release of pollutants due to inundation.

[32] Sustainable Groundwater Management Act Data Viewer, https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#boundaries, accessed April 25, 2024.
[33] Ibid.
[34] Federal Emergency Management Agency, Flood Insurance Rate Maps, Panel Number 06013C0277F, effective June 15, 2009.
[35] Federal Emergency Management Agency, Flood Insurance Rate Maps, Panel Number 06013C0280G, effective March 20, 2017.
[36] Federal Emergency Management Agency, Flood Insurance Rate Maps, Panel Number 06013C0089H, effective March 20, 2017.
[37] City of Martinez, Safety Element, Figure 8-7, Dam Failure Inundation Areas, 2022.

3.9 NOISE

The purpose of this section is to evaluate potential noise related impacts to surrounding land uses as a result of implementation of the proposed project. This section evaluates short-term construction-related impacts, as well as long-term operational-related impacts. This section is based in part on the noise measurements and traffic noise modeling data, which are includes as Appendix H.

3.9.1 Regulatory Setting

Federal

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (USEPA) offers guidelines for community noise exposure in the publication Noise Effects Handbook – A Desk Reference to Health and Welfare Effects of Noise. These guidelines consider occupational noise exposure as well as noise exposure in homes. The USEPA recognizes an exterior noise level of 55 decibels day-night level (dB L_{dn}) as a general goal to protect the public from hearing loss, activity interference, sleep disturbance, and annoyance. The USEPA and other federal agencies have adopted suggested land use compatibility guidelines that indicate that residential noise exposures of 55 to 65 dB L_{dn} are acceptable. However, the USEPA notes that these levels are not regulatory goals, but are levels defined by a negotiated scientific consensus, without concern for economic and technological feasibility or the needs and desires of any particular community.

Federal Transit Administration Noise and Vibration Standards

There are no vibration standards that are specifically applicable to the proposed project. The Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* provides criteria for acceptable levels of groundborne vibration for various types of buildings, which are shown in Table 3.9-1.

Table 3.9-1: Structural Vibration Damage Criteria

Building Category	Peak Particle Velocity for Continuous Sources (PPV) (inches/second [inch/sec])
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineering concrete and masonry (no plaster)	0.3
III. Nonengineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: FTA, *Transit Noise and Vibration Impact Assessment Manual*, 2018.

State

Office of Land Use and Climate Innovation General Plan Noise Element Guidelines

The Governor's Office of Land Use and Climate Innovation (LUCI [formerly Planning and Research]) *Noise Element Guidelines* include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The *Noise Element Guidelines* contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the

community noise equivalent level (CNEL). Table 3.9-2 presents guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

As shown in Table 3.9-2, the range of noise exposure levels overlap between the normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable categories. LUCI's *State General Plan Guidelines* note that noise planning policy needs to be rather flexible and dynamic to reflect not only technological advances in noise control, but also economic constraints governing application of noise-control technology and anticipated regional growth and demands of the community. In project specific analyses, each community must decide the level of noise exposure its residents are willing to tolerate within a limited range of values below the known levels of health impairment. Therefore, the City may use their discretion to determine which noise levels are considered acceptable or unacceptable, based on land use, project location, and other project factors.

Table 3.9-2: Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density, Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75 – 85
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	70 – 85
Transient Lodging – Motel, Hotels	50 – 65	60 – 70	70 – 80	80 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 – 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 – 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 75	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 70	NA	70 – 80	80 – 85
Office Buildings, Business Commercial and Professional	50 – 70	67.5 – 77.5	75 – 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75 – 85	NA

Notes: NA = not applicable; L_{dn} = day/night average; CNEL = community noise equivalent level; dBA = A-weighted decibels

Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable - New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable - New construction or development should generally not be undertaken.

Source: Office of Land Use and Climate Innovation, *General Plan Guidelines*, 2003.

Local

City of Martinez General Plan

On November 2, 2022, the City Council adopted the General Plan 2035 (General Plan). The Noise and Air Quality Element includes goals, policies, and measures that could control and reduce noise levels in the City. The following goals and policies related to noise are applicable to the proposed project:

- Goal NA-G-1: Continue to implement City noise standards to provide protection from unsafe and undesirable noise levels.
    - Policy NA-P-1.3: Any City-required acoustical analysis shall be prepared according to specific standards and practices.
    - Policy NA-P-1.4: New development shall comply with City noise standards.
    - Policy NA-P-1.5: Emergency vehicle, siren, horn, and similar noise sources such as nonvehicular emergency sirens, shall be exempt from provisions of the General Plan noise standards.
- Goal NA-G-2: Encourage acceptable noise levels in Martinez.
    - Policy NA-P-2.1: Maintain a pattern of land uses that separates noise-sensitive land uses from major traffic noise sources to the extent feasible.
    - Policy NA-P-2.2: New development should be site planned and architecturally designed to minimize and mitigate indoor and exterior noise and noise impacts on neighboring uses where feasible.
    - Policy NA-P-2.3: Discourage the establishment of acoustically incompatible land uses in juxtaposition or adjacency to each other, when possible.
    - Policy NA-P-2.4: Discourage land use patterns and traffic patterns that expose sensitive noise receptors (hospitals, schools, churches, senior care uses, etc.) to noise levels that exceed noise standards and the City's Noise Control Ordinance.
    - Policy NA-P-2.5: Use open space, wherever practical, to isolate noise sources from sensitive land uses by the employment of adequate separation distances.
    - Policy NA-P-2.6: Protect parks and recreational areas from excessive noise to permit the enjoyment of sports and other leisure time and recreational activities.
    - Policy NA-P-2.7: Reduce noise impacts from construction activities.
- Goal NA-G-3: Mitigate noise sources in Martinez in keeping with the Noise Control Ordinance.
    - Policy NA-P-3.1: Require where necessary the preparation of ground-borne vibration studies by qualified professionals when construction activities include vibration-sensitive uses and significant site grading, foundation work, or underground work.
    - Policy NA-P-3.2: Encourage City-hired contractors and maintenance companies to purchase and use quiet equipment and tools, and refrain from causing undue noise problems.
    - Policy NA-P-3.3: Recommend the use of noise-mitigating devices, such as sound attenuating paving on streets, wall barriers, landscaping, earth berms, sound walls, mufflers, sound traps, baffles, and/or other noise reduction techniques as

conditions of development approval to reduce noise intrusion from transportation and fixed sources.

City of Martinez Municipal Code

The City of Martinez Municipal Code (Municipal Code) Section 8.34 (Noise Control) prescribes standards prohibiting detrimental levels of noise to implement the goals of the Noise Element of the General Plan. The following standards would be applicable to the proposed project:

8.34.020 Noise Standards

A. Acceptable standards for noise levels shall be as follows:
    1. A L_{dn} of 45 dBA is the standard for interior noise levels. An L_{dn} of 45 dBA is achieved by an allowable interior noise level of 35 dBA between 10:00 p.m. - 7:00 a.m. and 45 dBA between 7:00 a.m. - 10:00 p.m.
    2. A L_{dn} of 60 dBA is the standard for exterior noise. An L_{dn} of 60 dBA is a maximum noise level of 50 dBA between 10:00 p.m. - 7:00 a.m. and 60 dBA between 7:00 a.m. - 10:00 p.m.

8.34.030 Noise Regulations

The following specific acts are declared to be public nuisances and are prohibited, subject to the exemptions set forth herein:

A. No person shall cause or allow to cause, any source of sound at any location within the City or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which when measured within public or private indoor or outdoor space on the property where the noise disturbance is being experienced, causes the noise level to exceed the standards set forth in Section 8.34.020.
B. The operation or use of any of the following before 7:00 a.m., or after 7:00 p.m. daily (except Saturday, Sunday, and State, federal or local holidays, when the prohibited time shall be before 9:00 a.m. and after 5:00 p.m.).
    1. A hammer or any other device or implement used to repeatedly pound or strike an object.
    2. An impact wrench, or other tool or equipment powered by compressed air.
    3. Any tool or piece of equipment powered by an internal-combustion engine such as, but not limited to, chain saw, backpack leaf blower, and lawn mower. Except as specifically included in this Chapter, motor vehicles, powered by an internal combustion engine and subject to the State of California Vehicle Code, are excluded from this prohibition.
    4. Any electrically or battery powered tool or piece of equipment used for cutting drilling, or shaping wood, plastic, metal or other materials or objects, such as but not limited to a saw, drill, lathe, or router.
    5. Any of the following: the operation and/or loading or unloading of heavy equipment (such as but not limited to bulldozer, road grader, back hoe), ground drilling and boring equipment, hydraulic crane and boom equipment, portable power generator or pump, pavement equipment (such as but not limited to pneumatic hammer, pavement breaker, tamper, compacting equipment), pile-driving equipment,

vibrating roller, sand blaster, gunite machine, trencher, concrete truck, and hot kettle pump and the like.

6. Construction, demolition, excavation, erection, alteration, or repair activity.

D. Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of 10:00 p.m. and 7:00 a.m. daily in such a manner so as to create a noise disturbance.

3.9.2 Environmental Setting

Noise Scale And Definitions

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear de-emphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately three dBA to around 140 dBA.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud, and 20 dBA higher four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). Typical A-weighted noise levels for various noise sources are shown in Table 3.9-3.

Table 3.9-3: Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1,000 feet	— 100 —	
Gas lawn mower at 3 feet	— 90 —	
Diesel truck at 50 feet at 50 miles per hour	— 80 —	Garbage disposal at 3 feet
Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet
Heavy traffic at 300 feet	— 60 —	
Quiet urban daytime	— 50 —	Dishwasher in next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime	— 30 —	Library
Quiet rural nighttime	— 20 —	
	— 10 —	Broadcast/recording studio
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: California Department of Transportation, September 2013, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*.

Many methods have been developed for evaluating community noise to account for, among other things:

- The variation of noise levels over time;
- The influence of periodic individual loud events; and
- The community response to changes in the community noise environment.

Typical descriptors of noise are defined in Table 3.9-4.

Table 3.9-4: Noise Descriptors

Term	Definition
Decibel (dB)	The unit for measuring the volume of sound equal to 10 times the logarithm (base 10) of the ratio of the pressure of a measured sound to a reference pressure (20 micropascals).
A-Weighted Decibel (dBA)	A sound measurement scale that adjusts the pressure of individual frequencies according to human sensitivities. The scale accounts for the fact that the region of highest sensitivity for the human ear is between 2,000 and 4,000 cycles per second (hertz).
Equivalent Sound Level (L_{eq})	The sound level containing the same total energy as a time varying signal over a given time period. The L_{eq} is the value that expresses the time averaged total energy of a fluctuating sound level.
Maximum Sound Level (L_{max})	The highest individual sound level (dBA) occurring over a given time period.
Minimum Sound Level (L_{min})	The lowest individual sound level (dBA) occurring over a given time period.
Community Noise Equivalent Level (CNEL)	A rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments are +5 dBA for the evening, 7:00 PM to 10:00 PM, and +10 dBA for the night, 10:00 PM to 7:00 AM.
Day/Night Average (L_{dn})	The L_{dn} is a measure of the 24-hour average noise level at a given location. It was adopted by the USEPA for developing criteria for the evaluation of community noise exposure. It is based on a measure of the average noise level over a given time period called the L_{eq}. The L_{dn} is calculated by averaging the L_{eq}'s for each hour of the day at a given location after penalizing the "sleeping hours" (defined as 10:00 PM to 7:00 AM) by 10 dBA to account for the increased sensitivity of people to noises that occur at night.
Exceedance Level (L_n)	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% (L_{01}, L_{10}, L_{50}, L_{90}, respectively) of the time during the measurement period.

Source: Cyril M. Harris, *Handbook of Noise Control*, 1979.

Health Effects Of Noise

Human response to sound is highly individualized. The effects of noise are often only transitory, but adverse effects can be cumulative with prolonged or repeated exposure. The effects of noise on the community can include noise-induced hearing loss, interference with communication, effects of noise on sleep, effects on performance and behavior, extra-auditory health effects, and annoyance. Annoyance is the most common issue regarding community noise. Field evaluations of community annoyance are useful for predicting the consequences of planned actions involving highways, airports, road traffic, railroads, or other noise sources. However, many factors influence

people's response to noise. The factors can include the character of the noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the occurrence. Additionally, non-acoustical factors, such as the person's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence people's response. As such, response to noise varies widely from one person to another and with any particular noise, individual responses will range from "not annoyed" to "highly annoyed."

Ground-Borne Vibration

Sources of ground-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration. Typically, ground-borne vibration, generated by man-made activities, attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore usually confined to short distances (i.e., 500 feet or less) from the source. Both construction and operation of development projects can generate ground-borne vibration.

Table 3.9-5 displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in Table 3.9-5 should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Table 3.9-5: Human Reaction and Damage to Buildings from Continuous Vibration Levels

Peak Particle Velocity (inch/second)	Human Reaction	Effect on Buildings
0.006–0.019	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level to which ruins and ancient monuments should be subjected
0.1	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Virtually no risk of architectural damage to normal buildings
0.2	Vibrations may begin to annoy people in buildings	Threshold at which there is a risk of architectural damage to normal dwellings[a]
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Architectural damage and possibly minor structural damage

[a] Historic and some old buildings have a threshold of 0.25 PPV (in/sec).
Source: California Department of Transportation, April 2020, *Transportation and Construction Vibration Guidance Manual*, Tables 5 and 12.

Existing Noise Environment

Sensitive Receptors

Human response to noise varies widely depending on the type of noise, time of day, and sensitivity of the receptor. Sensitive populations are more susceptible to the effects of noise than are the general population. Land uses considered sensitive by the State of California include schools, playgrounds, athletic facilities, hospitals, rest homes, rehabilitation centers, long-term care and mental care facilities. Generally, a sensitive receptor is identified as a location where human populations (especially children, senior citizens, and sick persons) are present. Land uses less sensitive to noise are business, commercial, and professional developments. Noise receptors categorized as being least sensitive to noise include industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, and transit terminals. These types of land use often generate high noise levels. Moderately sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, and outpatient clinics. The following land uses were identified as sensitive receptors in the project vicinity:

- Waterbird Regional Reserve Park located approximately 275 feet (0.05 mile) to the south of the project site;
- Single-family residences (located along Cabrilho Drive) located approximately 3,550 feet (0.67 mile) to the south of the project site; and
- Waterfront Park located approximately 8,850 feet (1.68 miles) to the west of the project site.

Ambient Noise Sources

In order to quantify existing ambient noise levels in the project area, Bollard Acoustical Consultants conducted noise measurements on March 13, 2024, between the hours of 11:30 a.m. and 1:30 p.m.; refer to Figure 3.9-1. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the day. The noise measurements were taken during "off-peak" (9:00 a.m. through 3:00 p.m.) traffic noise hours as this provides a more conservative baseline. During rush hour traffic, vehicle speeds and heavy truck volumes are often low. Free-flowing traffic conditions just before or after rush hour often yield higher noise levels.[1] Table 3.9-6 shows the short-term (L_{eq}) noise measurements that are considered representative of the noise levels near the project site.

Table 3.9-6: Ambient Noise Measurements

Measurement Location Number	Location	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)
NM-1	Near the Waterbird Regional Preserve Park rest stop, along Waterbird Way	58.6	54.0	66.5
NM-2	In front of 4095 Cabrilho Drive residence	53.8	47.7	68.3
NM-3	Inside the parking lot of Waterfront Park	51.2	39.9	65.4

Notes: dBA = A-weighted decibels; L_{eq} = Equivalent Sound Level; L_{min} = Minimum Sound Level; L_{max} = Maximum Sound Level
Source: Bollard Acoustical Consultants, March 13, 2024; refer to Appendix H.

[1] California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

Source: Google Earth Pro, March 2025

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MARTINEZ RAIL RESTORATION PROJECT

Noise Measurement Locations

Figure 3.9-1

3.9.3 Methodology

Evaluating Construction Noise Impacts

The 2006 *FHWA Highway Construction Noise Handbook* prepared by FHWA identifies noise levels generated by various construction equipment and has been used to determine the construction noise levels generated from the proposed project at the nearest sensitive receptors. The City of Martinez does not have a quantitative threshold that applies to noise levels at active construction sites. To evaluate whether the proposed project would generate potentially significant temporary construction noise levels at off-site sensitive receiver locations, a construction-related noise level threshold was utilized from the Occupational Noise Exposure prepared by the National Institute for Occupational Safety and Health (NIOSH). As a division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction related noise level threshold starts at 85 dBA for more than eight hours per day, and for every 3-dBA increase, the exposure time is cut in half. For the purposes of this analysis, the lowest, most conservative construction noise level threshold of 85 dBA L_{eq} was used as an acceptable threshold for construction noise at the nearby sensitive receptor locations. Since this construction-related noise level threshold represents the average of the noise source over a given time, they are expressed as L_{eq} noise levels. Therefore, the noise level threshold of 85 dBA L_{eq} over a period of eight hours or more is used to evaluate the potential project-related construction noise level impacts at the nearby sensitive receptor locations. Table 3.9-7 summarizes the proposed construction schedule and the construction equipment list provided by the Project Applicant.

Evaluating Operational Noise Impacts

The proposed project would reestablish the former rail line on the south side of the existing Martinez Terminal, connecting it to the existing UPRR railroad tracks south of Waterfront Road. Establishment of the rail service to the project site would not affect existing rail traffic, as the cars would be added to the existing local freight trains currently operating in the area. Therefore, the proposed project would not add train trips compared to the existing conditions. The proposed project may generate nominal new vehicle trips associated with the two additional employees required for project operations. As such, operational noise impacts are discussed qualitatively.

Evaluating Construction Vibration Impacts

The FTA *Transit Noise and Vibration Impact Assessment Manual* identifies various vibration damage criteria for different building classes, as shown in Table 3.9-1. As the nearest sensitive receptor structures to project construction activities are residences, the architectural damage criterion for continuous vibrations at residential structures of 0.3 inch-per-second PPV is applied in the analysis.

Table 3.9-7: Construction Schedule and Equipment

Construction Activity	Start Month/Year	Duration	Equipment	Equipment Count
Pipeline Relocation	April 2026	2 months	Excavators	2
			Forklifts	1
			Graders	1
			Other Construction Equipment	1
			Pumps	1
			Rough Terrain Forklifts	1
			Signal Boards	2
			Skid Steer Loaders	1
			Surfacing Equipment	1
			Tractors/Loaders/Backhoes	1
			Trenchers	1
			Welders	4
Demolition	June 2026	1 month	Concrete/Industrial Saws	1
			Forklifts	1
			Other Construction Equipment	1
			Rough Terrain Forklifts	1
			Skid Steer Loaders	1
			Tractors/Loaders/Backhoes	2
Site Preparation	July 2026	1 month	Excavators	2
			Forklifts	1
			Graders	2
			Other Construction Equipment	1
			Rollers	1
			Rough Terrain Forklifts	1
Civil and Mechanical Construction	August 2026	5 months	Aerial Lifts	1
			Concrete/Industrial Saws	1
			Cranes	1
			Excavators	1
			Forklifts	1
			Graders	1
			Other Construction Equipment	1
			Paving Equipment	1
			Pumps	1
			Rollers	1
			Rough Terrain Forklifts	1
			Signal Boards	2
			Skid Steer Loaders	1
			Surfacing Equipment	1
			Tractors/Loaders/Backhoes	1
			Trenchers	1
			Welders	4
Electrical, Fire System, and Miscellaneous Activities	January 2027	3 months	Aerial Lifts	1
			Air Compressors	1
			Cranes	1
			Forklifts	1
			Other Construction Equipment	1
			Paving Equipment	1
			Tractors/Loaders/Backhoes	1

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to noise are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to noise if it would:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or
- Generate excessive groundborne vibration or groundborne noise levels.

The Appendix G significance criterion noted below was scoped out of the analysis for further consideration in the Initial Study (Appendix A), and is discussed in Chapter 4, Other CEQA Considerations, of this Draft EIR.

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

3.9.4 Impact Analysis

NOI-1 Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Construction activities generally are temporary and have a short duration, resulting in periodic increases in the ambient noise environment. The proposed project involves construction activities associated with pipeline relocation, demolition, site preparation, civil and mechanical construction, and electrical, fire system, and miscellaneous activities. The proposed project would be constructed in a single phase over a period of approximately 12 months. Ground-borne noise and other types of construction-related noise impacts typically occur during the initial site preparation phase, which has the potential to generate the highest levels of noise. Construction equipment produces maximum noise levels when equipment is operating under full power conditions (i.e., the equipment engine at maximum speed). However, equipment used on construction sites typically operates under less than full power conditions, or partial power. To characterize construction-period noise levels more accurately, the average (L_{eq}) noise level associated with each construction stage was calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment simultaneously operating on partial power.

The estimated construction noise levels at the nearest noise-sensitive receptors are presented in Table 3.9-8. Noise levels from construction equipment (listed in Table 3.9-7) and activities were modeled using the Federal Highway Administration's Roadway Construction Noise Model (RCNM). To present a conservative impact analysis, the estimated noise levels were calculated for a scenario in which all heavy construction equipment were assumed to operate simultaneously on part power. Results based on the RCNM also conservatively assume a clear line-of-sight. The shielding of buildings and other barriers that interrupt line-of-sight conditions would help further

reduce noise levels than what is shown in Table 3.9-8. Construction noise was estimated from the boundary of project construction activity area to the three measurement locations.

Table 3.9-8: Noise Levels Generated during Construction Phases

Phase	Estimated Exterior Construction Noise Level at NM-1 (dBA L_{eq})[a]	Estimated Exterior Construction Noise Level at NM-2 (dBA L_{eq})[a]	Estimated Exterior Construction Noise Level at NM-3 (dBA L_{eq})[a]
Pipeline Relocation	73.0	52.3	42.8
Demolition	72.7	50.7	42.5
Site Preparation	74.5	50.5	44.4
Civil and Mechanical Construction	75.4	53.2	45.3
Electrical, Fire System, and Miscellaneous Activities	70.6	48.4	40.4

Notes:
a. These noise levels conservatively assume the simultaneous operation of all heavy construction equipment at the same precise location. Refer Appendix H for modeled heavy construction equipment.
Source: Federal Highway Administration, Roadway Construction Noise Model (RCNM), 2006.

Although the Waterbird Regional Preserve (NM-1, approximately 275 feet south of the project site) is considered less sensitive to construction noise than residential uses, this location is the closest to the project site. As shown in Table 3.9-8, construction noise levels at NM-1 would range from 70.6 to 75.4 dBA L_{eq}. As shown in Table 3.9-8, the nearest residential receptor to the project site (NM-2, single-family residential uses approximately 3,550 feet to the south) could be exposed to temporary and intermittent construction noise levels ranging from 48.4 to 53.2 dBA L_{eq}. As such, construction noise would not have the potential to exceed the NIOSH significance threshold of 85 dBA. Furthermore, project construction activities would comply with the construction timings specified in Section 8.34.030 of the Municipal Code, which restricts construction activities to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday. Construction activities shall not occur before 9:00 a.m. and after 5:00 p.m. on Saturday, Sunday, and State, federal or local holidays. It should be also noted that construction activities would be exempt from the City's Noise Ordinance within the permitted construction hours in recognition that construction activities undertaken during daytime hours are a typical part of living in an urban environment and do not cause a significant disruption. Thus, with adherence to the City's noise ordinance, noise impacts from construction activities associated with the proposed project would be less than significant.

Operation

As discussed in Chapter 2, Project Description, the proposed project would not add train trips to the existing UPRR tracks, and no substantial new stationary noise sources are anticipated. It should be noted that the distance between the project site and the nearest sensitive receptor is approximately 3,550 feet. The proposed project may generate vehicle trips associated with the two additional employees required for project operations. However, noise generated from two employees' commute trips would be nominal. As such, the proposed project would not increase operational noise levels compared to existing conditions, and the impact would be less than significant.

NOI-2 Would the project generate excessive groundborne vibration or groundborne noise levels?

Construction

Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. Construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. The vibration level at which human annoyance is perceived is 0.2 inch/sec PPV.

Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 25 feet from most construction vibration sources. The effect of vibration on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures. In addition, not all buildings respond similarly to vibration generated by construction equipment.

The project's construction activities have the potential to generate ground-borne vibration. It should be noted that the nearest receptor (Waterbird Regional Preserve Park) does not include any buildings or structures where sensitive receptors would work or reside. In addition, at the distance of approximately 275 feet, vibration levels would be reduced to non-perceivable levels, which would not impact the Waterbird Regional Preserve Park. Therefore, vibration impacts from the project's construction activities at the Waterbird Regional Preserve Park would be less than significant. The project's evaluation uses the FTA architectural damage criterion for continuous vibrations of 0.3 inch/sec PPV for engineered concrete and masonry because the closest sensitive receptor structures to the project site are single-family residential buildings. Table 3.9-9 identifies various vibration velocity levels for types of construction equipment that could operate within the project area during construction.

Table 3.9-9: Typical Vibration Levels for Construction Equipment

Equipment	Approximate PPV at 25 feet (inch/sec)	Approximate PPV at 3,550 feet (inch/sec)[a]
Large bulldozer	0.089	0.0001
Loaded trucks	0.076	0.0001
Small bulldozer	0.003	<0.0001

Notes:

a. Calculated using the following peak particle velocity (PPV) formula:

$PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$

where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance

PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the FTA *Transit Noise and Vibration Impact Assessment Guidelines*

D = the distance from the equipment to the receiver

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, April 2020.

As indicated in Table 3.9-9, vibration velocities from typical heavy construction equipment operation would range from 0.003 to 0.089 inch/sec PPV at 25 feet from the source of activity. Vibration velocities were also calculated for the nearest sensitive receptor, located approximately 3,550 feet south of the project site. Vibration levels during the operation of construction equipment would be approximately 0.0001 inch/sec PPV or less at a distance of 3,550 feet. As a result, construction groundborne vibration would not be capable of exceeding the human annoyance vibration threshold of 0.2 inch/sec PPV or the architectural damage criterion for continuous vibrations of 0.3 inch/sec PPV at the nearest structures. Therefore, vibration impacts from the project's construction activities would be less than significant.

Operation

As previously discussed, the nearest sensitive receptor is located at approximately 3,550 feet to the south of the project site. The proposed project would not add new train trips on the existing UPRR tracks. Additionally, the proposed project would not involve equipment, facilities, or activities that would result in perceptible groundborne vibration compared to the existing conditions. As such, it can be reasonably inferred that operation of the proposed project would not create perceptible vibration impacts to the nearest sensitive receptors. Therefore, vibration impacts related to human annoyance and building damage during operation would be less than significant.

3.9.5 Mitigation Measures

No mitigation measures are required.

3.9.6 Level of Significance After Mitigation

Impacts related to noise and vibration would be less than significant.

3.9.7 Cumulative Impacts

Cumulative Construction Noise

Construction activities associated with the proposed project and cumulative growth may overlap, resulting in increased construction noise in the project vicinity. However, construction noise primarily affects the areas immediately adjacent to a construction site. The related projects are located more than 1 mile from the project site. Due to the distance and intervening structures, cumulative construction noise from related projects would not be perceptible. However, the proposed project and related projects within the City would be required to comply with the City's noise regulations and allowable hours of construction. Therefore, the proposed project's contribution to cumulative noise impacts would be less than significant.

Cumulative Operational Noise

As discussed above, operation of the proposed project would not result in increased noise levels when compared to the existing conditions. Therefore, the proposed project's contribution to cumulative operational noise impacts would be less than significant.

Cumulative Vibration Impacts

As discussed above, project operational activities would not generate substantial groundborne vibration, and project construction activities would not generate groundborne vibration on-site above the human annoyance vibration threshold of 0.2 inch/sec PPV or the architectural damage criterion for continuous vibrations of 0.3 inch/sec PPV at the nearest structures as established by the FTA. Groundborne vibration generated from the related projects would be isolated to the area

immediately surrounding the vibration source. The related projects are located more than 1 mile from the project site. Therefore, the proposed project's contribution to cumulative vibration impacts would be less than significant.

3.10 TRANSPORTATION

This section evaluates the potential transportation impacts associated with implementation of the proposed project. This section presents the applicable regulatory setting, environmental setting, methodology for determining potential impacts, analysis of the potential transportation impacts resulting from implementation of the proposed project, proposed measures to mitigate any significant or potentially significant impacts if such impacts are identified, and an analysis of potential cumulative impacts. The analysis relies, in part, on information included in the *Martinez Terminal Rail Restoration – VMT Screening Assessment* (VMT Memorandum), prepared by Michael Baker International, dated July 23, 2024, and provided as Appendix I.

3.10.1 Regulatory Setting

State

California Department of Transportation

The California Department of Transportation (Caltrans) is the state agency responsible for the design, construction, maintenance, and operation of the California State Highway System, as well as the segments of the Interstate Highway System that lie within California.

Railway-Highway Crossing Program Section 130

The purpose of the Caltrans Section 130 Program, also referred to as Railway-Highway Crossing Program, is to reduce the number and severity of highway accidents and to improve safety for motorists, bicyclists, and pedestrians at existing at-grade railroad crossings. The Section 130 Railway-Highway Crossing Program is authorized by Title 23, United States Code, Section 130 and managed by the Division of Local Assistance. The Caltrans Railway-Highway Crossing Program is a collaborative effort led by the California Public Utilities Commission (CPUC), funded by the Federal Highway Administration, and implemented by Caltrans in cooperation with local agencies and railroads throughout California. Caltrans is responsible for administering funds, contracting and oversight of the Section 130 projects. The CPUC is responsible for creating the Section 130 priority funding list, development of scope, and preliminary cost estimates. Local agencies and railroad companies work together to complete design, environmental and construction for Section 130 funded safety improvements.[1]

Senate Bill 375

Senate Bill (SB) 375 requires metropolitan planning organizations to prepare a sustainable communities strategy as part of their regional transportation plans. The Sustainable Communities Strategy demonstrates how the region could meet its greenhouse gas (GHG) emissions reduction targets through integrated land use, housing, and transportation planning. Specifically, the Sustainable Communities Strategy must identify land use and transportation strategies that combined with the Regional Transportation Plan project list will reduce GHG emissions from automobiles and light trucks in accordance with targets set by the California Air Resources Board (CARB).

[1] Caltrans, Caltrans Railway-Highway Crossing Program (RHCP) Section 130, https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/sec130, accessed September 16, 2024.

California Public Utilities Commission General Order 88-B

The CPUC has safety and security regulatory authority over all rail transit and other public transit fixed-guideway systems under Public Utilities Code Section 99152 and other statutes. As part of the Section 130 Railway-Highway Crossing Program, CPUC General Order 88-B (GO 88-B) provides a process for CPUC staff to authorize certain rail crossing modifications. After completing their design package, local agencies must work with railroads to complete a single GO 88-B form to construct or alter the railroad crossing. The GO 88-B form must be submitted after design is completed and full funding has been secured. The GO 88-B form must be approved by the CPUC prior to construction.[2]

Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed SB 743, which went into effect in January 2014. SB 743, codified in Public Resources Code Section 21099, directed the Governor's Office of Planning and Research to prepare guidelines establishing criteria for determining the significance of transportation impacts that promote the reduction of greenhouse gas (GHG) emissions, the development of multimodal transportation networks, and a diversity of land uses. SB 743 and Public Resources Code Section 21099 further require that, upon certification of such guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment" pursuant to CEQA. In 2018, the Governor's Office of Planning and Research adopted revised CEQA guidelines that eliminated auto delay, level of service, and other measures of vehicular capacity or traffic congestion as the basis for analyzing transportation impacts under CEQA. As of July 1, 2020, transportation impacts under CEQA are analyzed using vehicle miles traveled (VMT) as the appropriate metric.

CEQA Guidelines Section 15064.3

Revisions to the CEQA Guidelines pursuant to SB 743 include the adoption of Section 15064.3, *Determining the Significance of Transportation Impacts*. CEQA Guidelines Section 15064.3 establishes VMT as the most appropriate measure of transportation impacts. CEQA Guidelines Section 15064.3 describes specific considerations for evaluating a project's transportation impacts, and states that, "[f]or purposes of this section 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." Generally, land use projects within 0.5 miles of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact.[3] Projects that decrease VMT in the project area compared to existing conditions should be presumed to have a less than significant transportation impact. A lead agency has discretion to choose the most appropriate methodology to evaluate VMT, including whether to express the change in absolute terms, per capita, per household, or in any other measure. A lead agency may also use models to estimate VMT and may revise those estimates to reflect professional judgment based on substantial evidence.

[2] Caltrans, CPUC General Order 88-B, https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/sec130/cpuc-general-order-88-b, accessed September 16, 2024.

[3] "Major transit stop" is defined in Public Resources Code Section 21064.3 as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. "High-quality transit corridors" are defined in Public Resources Code Section 21155 as a corridor with fixed-route bus service with service intervals no longer than 15 minutes during peak commute hours.

Regional

Regional Transportation Plan/Sustainable Communities Strategy: Plan Bay Area 2050

The most recent Regional Transportation Plan/Sustainable Communities Strategy, known as Plan Bay Area 2050, was jointly adopted by the Metropolitan Transportation Commission and Association of Bay Area Governments in October 2021. Plan Bay Area 2050 is a long-range regional plan for the nine-county San Francisco Bay Area, encompassing housing, economic, transportation, and environmental strategies designed to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. Plan Bay Area 2050 is composed of 35 integrated strategies that provide a blueprint for how the Bay Area can accommodate future growth and make the region more equitable and resilient in the face of unexpected challenges and achieve regional GHG emissions reduction targets established by CARB, pursuant to SB 375.

Plan Bay Area 2050 sets forth regional transportation policy and provides capital program planning for all regional, State, and federally funded projects. In addition, Plan Bay Area 2050 provides strategic investment recommendations to improve regional transportation system performance over the next 20 years, as well as investments in regional highway, transit, local roadway, bicycle, and pedestrian projects. Plan Bay Area 2050 envisions a transportation system that, above all, prioritizes improved access to opportunity for all Bay Area residents. The plan's 12 transportation strategies are categorized under the following themes:[4]

1. Maintain and optimize the existing transportation system: First and foremost, the plan identifies funding to operate and maintain our existing system of transit routes, roads and bridges, laying a strong foundation for further investments and policies. Strategies include reversing pandemic-related cuts to total transit service hours, creating a seamless transit experience with reformed fare payments, addressing near-term highway bottlenecks, implementing road pricing on select corridors for long-term congestion relief, funding community-led transportation investments in Equity Priority Communities, and supporting ongoing regional programs and local priorities.
2. Create healthy and safe streets: On top of this optimized system, roads would be made safer for all users—including drivers, cyclists, rollers (for example, people that use a wheelchair or scooter) and pedestrians—through context-specific speed limit reductions and a network of protected bike lanes and trails designed for people of all ages. Strategies include building a Complete Streets network and advancing a Vision Zero road safety policy to protect all road users.
3. Build a next-generation transit network: Finally, a slate of investments in transit steers the Bay Area toward a 21st century system that meets the needs of a growing population and delivers fast, frequent and reliable service throughout the region. Strategies invest in improving the frequency and reliability of local transit, selectively extend regional rail and increase frequencies to address crowding, and build out the express lanes network with coordinated express bus service.

[4] Metropolitan Transportation Commission and Association of Bay Area Governments, Plan Bay Area 2050, October 2021, available at: https://planbayarea.org/finalplan2050, accessed November 10, 2024.

Local

City of Martinez General Plan

The Circulation Element of the City of Martinez General Plan was last updated in 2022 and addresses the movement of people and goods in and around the City and how Martinez is connected to the region. The City's community mobility value is based on creating "a sense of place" with a walkable Downtown, distinct traditional and suburban neighborhoods and mixed-use corridors, and accessible commercial and employment centers. The Circulation Element also focuses on improving vehicular and non-vehicular mobility and public transportation, and connecting transit hubs, such as the Amtrak Station and potential ferry service, within the City and with communities throughout the Bay Area.[5] The following goals and policies related to transportation are applicable to the proposed project:

- Goal C-G-2: Maintain and/or improve mobility in the City by considering alternative circulation system improvements beyond those identified within Table 6-3 Planned Major Improvements that increase system capacity and are found acceptable to the City, its residents, and where applicable, Caltrans or other agency.
    - Policy C-P-2.2: Strive to reduce total vehicle miles traveled (VMT) by City residents by planning an efficient circulation system that complements existing and planned land uses, improves access to alternative transportation modes for bicycle, pedestrian, and transit users, and provides more direct routes to City and regional destinations.
    - Policy C-P-2.3: Ensure compatibility and complementary relationships between the circulation system and existing and planned land uses, promoting environmental objectives such as safe and uncongested neighborhoods, energy conservation, reduction of air and noise pollution, and access to bicycle, pedestrian, and transit facilities.

- Goal C-G-7: Maintain and update street standards for design, construction and maintenance of "Complete Streets." When constructing or modifying transportation facilities, strive to provide for a balanced system for the movement of vehicles, commercial trucks, alternative and low emissions vehicles, transit and its users, bicyclists, pedestrians, children, persons with disabilities, and seniors appropriate for the road classification and adjacent land use.
    - Policy C-P-7.2: Design and implement "Complete Streets" that enable safe, comfortable and attractive access for all users – pedestrians, motorists, bicyclists, and transit riders of all ages and abilities – in a manner that is compatible with and complementary to adjacent development and promotes connectivity between complementary land uses. New development projects must contribute to or construct transit facilities where the project would induce or increase demand on nearby arterial and collector streets, as determined through a Transportation Impact Analysis funded and completed by the project applicant.

- Goal C-G-9: Provide complete streets integrating a comprehensive transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists,

[5] City of Martinez, General Plan Circulation Element, November 2022, available at: https://www.cityofmartinez.org/home/showpublisheddocument/4367/638584485030200000, accessed November 10, 2024.

movers of commercial goods, users and operators of public transportation, seniors, children, youth and families.

  - Policy C-P-9.1: Review street construction, development projects and utility projects to identify opportunities to implement complete streets.

- Goal C-G-11: Promote the safe and efficient movement of goods with minimum disruptions to residential areas.
  - Policy C-P-11.3: Continue industrial expansion in the north industrial area to minimize the neighborhood impacts of truck movements.
  - Policy C-P-11.5: Require new development and roadway projects to provide and maintain railroad crossings that include safety measures, such as grade separations for major thoroughfares, improving existing at-grade crossings, and/or providing adequate lighting, signage, and fencing.
  - Policy C-P-11.6: Study the feasibility of establishing Railroad Quiet Zones to improve neighborhood quality of life for residents who live in the vicinity of railroad at-grade crossings.

City of Martinez Municipal Code

Pursuant to Martinez Municipal Code Chapter 22.55, the City currently charges transportation impact fees as a condition of approval to defray the cost of public services, facilities, improvements, and amenities that are created because of new development. Each development pays only for construction of those public transportation facilities where there is a reasonable relationship between the facilities funded and the need for the new public transportation facilities created by the development. Each type of development, including industrial developments, shall contribute to the funding of the facilities made necessary, in whole or in part, by that development in proportion to the need for the facilities created by that type of development. The amount of transportation impact fees is based on the percentage of the cost of the public facilities improvements attributable to the new development. Martinez Municipal Code Section 22.55.030 outlines methodology for determining specific fees.

3.10.2 Environmental Setting

Roadways

Local roadway access to the project site is provided via Waterfront Road, which bisects the project site and is categorized as a Collector.[6] Collector streets within the City are designated as two-lane facilities that function as connector routes between local and arterial streets and provide access to residential, commercial, and industrial properties.

Regional access to the project site is provided via Interstate 680, approximately 0.6 miles west of the project site. Interstate 680 is the main freeway that directly serves the City of Martinez. The freeway is a north-south eight-lane facility that is a major link in the state highway system, providing regional access to cities including San Jose and Walnut Creek.[7]

[6] City of Martinez, General Plan Circulation Element, November 2022, Figure 6-1 Circulation Map, available at: https://www.cityofmartinez.org/home/showpublisheddocument/4501/638626954155770000, accessed November 10, 2024

[7] City of Martinez, General Plan Circulation Element, November 2022, available at: https://www.cityofmartinez.org/home/showpublisheddocument/4367/638584485030200000, accessed November 10, 2024.

Transit

Rail

Rail transportation in the City currently encompasses passenger and freight services. Union Pacific operates the existing railroad tracks that parallel the waterfront area west of Marina Vista Avenue. These tracks make up the service corridor for all passenger movement and the majority of freight traffic traveling to Sacramento, the Central Valley, and areas along the West Coast. Burlington Northern Santa Fe (BNSF) also operates freight trains along the corridor on a reduced basis. Additionally, BNSF operates the existing railroad tracks that bisect the City about 1.5 to 2 miles south of the Union Pacific tracks. Union Pacific operates the majority of freight traffic through the Martinez rail corridor. Currently, at-grade crossings of the UPRR tracks are located at Berrellesa Street and Ferry Street near the downtown waterfront area and Fairmont Road/Rococo Road to the northeast that serves industrial areas. The BNSF track, south of the Union Pacific track, has less activity and no public at-grade railroad crossings. The BNSF track is elevated through the City limits.[8]

The eastern portion of the project site is located within the UPRR corridor and contains the UPRR Mococo Rail Line, which consists of a single spur of track on a raised gravel bed. This rail line provides service to 15 trains daily, 13 of which are commuter trains and two of which are freight trains.

Bus

There are no bus lines located within the vicinity of the project site.

Bicycle and Pedestrian Facilities

Currently, there are no bike paths within the vicinity of the project site. As described in the City's Circulation Element of the General Plan, the Countywide Bicycle and Pedestrian Plan proposes the extension of bicycle lanes eastward from the current terminus at Interstate 680 along Waterfront Road to Point Edith Wildlife Area, which is located approximately 1.6 miles east of the project site. The section of Waterfront Road proposed for bicycle lane extension is primarily within the County, except for a 0.5-mile segment located approximately 0.75 mile east of Interstate 680 that is within City limits.[9,10]

There are no pedestrian facilities located within the vicinity of the project site.

3.10.3 Methodology

Vehicle Miles Traveled

The primary resource for the project's VMT screening assessment is the Contra Costa County *Transportation Analysis Guidelines* dated June 23, 2020 (County Guidelines). As outlined in the County Guidelines, certain projects that meet established screening criteria based on size, location, proximity to transit, or trip-making potential may be presumed to have a less than significant transportation impact under CEQA and do not require a full detailed VMT analysis.

8 City of Martinez, General Plan Environmental Impact Report, 2022.

9 City of Martinez, General Plan Circulation Element, November 2022, Figure 6-1 Circulation Map, available at: https://www.cityofmartinez.org/home/showpublisheddocument/4501/638626954155770000, accessed November 22, 2024

10 Contra Costa County, 2045 General Plan – Transportation Element, available at: https://www.contracosta.ca.gov/DocumentCenter/View/84945/Chapter-5---Transportation-Element-PDF, accessed November 22, 2024.

Specifically, the following types of projects would be expected to result in a less -than significant impact under CEQA and would not require further VMT analysis:

i) Small Projects, including:
    a. Projects that generate or attract fewer than 110 daily vehicle trips;[11] or,
    b. Projects of 10,000 square feet or less of non-residential space or 20 residential units or less, or otherwise generating less than 836 VMT per day.
ii) Projects near transit stations: Residential, retail, office projects, or mixed-use projects proposed within 0.5 mile of an existing major transit stop[12] or an existing stop along a high quality transit corridor.[13]
iii) Projects in low VMT areas: Residential projects (home-based VMT) at 15 percent or below the baseline County-wide home-based average VMT per capita, or employment projects (employee VMT) at 15 percent or below the baseline Bay Area average commute VMT per employee in areas with low VMT that incorporate similar VMT reducing features (i.e., density, mix of uses, transit accessibility).
iv) Public facility projects: Public facilities (e.g. emergency services, passive parks (low-intensity recreation, open space), libraries, community centers, public utilities) and government buildings.

Where a project does not meet the above screening criteria, a full VMT analysis with VMT calculation would be required.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to transportation are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to transportation if it would:

- Conflict with a program plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b); or
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

[11] As noted in the Contra Costa County *Transportation Analysis Guidelines*, CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines Section 15301(e)(2)). Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

[12] Per Public Resources Code Section 21064.3, a major transit stop refers to a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

[13] Per Public Resources Code Section 21155, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

The Appendix G significance threshold noted below was scoped out of the analysis for further consideration in the Initial Study (Appendix A), and is discussed in Chapter 4, Other CEQA Considerations, of this Draft EIR.

- Would the project result in inadequate emergency access?

3.10.4 Impact Analysis

TRA-1 Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Construction

The proposed project would be required to undergo CPUC review in accordance with General Order 88-B: Modifications of an Existing Rail Crossing prior to construction. The new track would be designed to be installed between the existing bridge columns, with applicable pier protections. The GO 88-B form and proposed modifications would be reviewed and agreed upon by the CPUC, road authority, and UPRR. The GO 88-B form must be submitted after design is completed and full funding has been secured, and the GO 88-B form must be approved by the CPUC prior to construction. With CPUC review and approval, the proposed project would not conflict with this CPUC policy. Adherence to existing permitting requirements would ensure that construction impacts to transit facilities would be less than significant.

Construction activities associated with the proposed project would include excavation, grading, soil compaction, and installation of the railroad track and other site improvements. A variety of equipment would be required during construction of the proposed project, including excavators, graders, compactors, and dump trucks. Construction equipment, vehicles, and materials would be transported to and from the project site using local roadways. As discussed in Chapter 2, Project Description, BMPs employed for construction activities would include the implementation of a Traffic Control Plan (TCP) prior to the start of construction activities. The TCP would be developed and implemented in consultation with the City and would identify traffic control measures such as temporary speed limit restrictions and defining the use of flaggers, warning signs, lights, barricades, and cones, etc., in accordance with standard guidelines required by the City. Additionally, the TCP would stipulate that construction activities completed within public street ROWs would require the use of a traffic control service, and any lane closures or traffic control measures would be consistent with those published in the California Joint Utility Traffic Control Manual. Implementation of the TCP and adherence to existing regulations would ensure that construction impacts to roadway, pedestrian, and bicycle facilities would be less than significant.

Therefore, the proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, and construction impacts would be less than significant.

Operation

As described in Section 3.10.2 above, there are no bicycle or pedestrian facilities located in the vicinity of the project site. As such, operation of the proposed project would not conflict with a program, plan, ordinance, or policy addressing bicycle and pedestrian facilities.

The programs, plans, ordinances, or policies that are applicable to the City's circulation system with respect to transit and roadways include Plan Bay Area 2050 and the City's Circulation Element of the General Plan. The proposed project's consistency with the applicable goal,

strategies, and policies of Plan Bay Area 2050 and the City's General Plan is evaluated in Table 3.10-1 and Table 3.10-2, respectively. As detailed therein, the proposed project would not interfere with existing UPRR track operations, including frequency, capacity, and reliability. In addition, implementation of the proposed project would reestablish rail service to the project site by reestablishing the former rail line on the south side of the existing Martinez Terminal, connecting it to the existing UPRR railroad tracks south of Waterfront Road. In relying on the existing rail infrastructure, the proposed project would minimize the need to extend product conveyance infrastructure and limit the amount of facility improvements required. Additionally, reestablishment of the rail service to the project site would not affect existing rail traffic, as the new train cars would be added to one of the two existing local freight trains currently operating in the area. As such, project operations would not require transportation via trucks or use of roadways, and implementation of the proposed project would not preclude the City from improving the quality and availability of local bus and light rail service, expanding the regional rail network, or maintaining complete streets. In addition, as detailed below under Threshold TRA-2, the proposed project would result in the addition of four daily vehicle trips over existing conditions. Based on the methodology provided in the County Guidelines, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts related to VMT would be less than significant. Furthermore, as the nominal increase in trips would not induce or increase demand on nearby arterial and collector streets, implementation of the proposed project would not be subject to Section 22.25 of the Martinez Municipal Code and payment of transportation impact fees would not be required.

Table 3.10-1: Project Consistency with Plan Bay Area 2050

Applicable Strategies	Project Consistency Analysis
Maintain and Optimize the Existing System	
T1. Restore, operate and maintain the existing system. Commit to operate and maintain the Bay Area's roads and transit infrastructure while reversing pandemic-related cuts to total transit service hours.	**Consistent.** Under existing conditions, products arrive at the Martinez Terminal via wharf or pipeline. Implementation of the proposed project would reestablish rail service to the project site by reestablishing the former rail line on the south side of the existing Martinez Terminal, connecting it to the existing UPRR railroad tracks south of Waterfront Road. Reestablishment of the rail service to the project site would not affect existing rail traffic, as the new train cars would be added to one of the two existing local freight trains currently operating in the area. In addition, as project operations would not require transportation via trucks or use of roadways, the proposed project would not affect the roadways in the vicinity of the project site, including Waterfront Road and Interstate 680. Therefore, the proposed project would support the restoration, operation, and maintenance of the existing system, and the proposed project would not conflict with this strategy.
Build a Next-Generation Transit Network	
T10. Enhance local transit frequency, capacity and reliability. Improve the quality and availability of local bus and light rail service, with new bus rapid transit lines, South Bay light rail extensions, and frequency increases focused in lower-income communities.	**Consistent.** The eastern portion of the project site is located within the UPRR corridor and contains the UPRR Mococo Rail Line, which consists of a single spur of track on a raised gravel bed. This rail line provides service to 15 trains daily, 13 of which are commuter trains and two of which are freight trains. The proposed project would reestablish the former rail line on the south side of the

Table 3.10-1: Project Consistency with Plan Bay Area 2050

Applicable Strategies	Project Consistency Analysis
T11. Expand and modernize the regional rail network. Better connect communities while increasing frequencies by advancing the Link21 new transbay rail crossing, BART to Silicon Valley Phase 2, Valley Link, Caltrain Downtown Rail Extension and Caltrain/High-Speed Rail grade separations, among other projects.	existing Martinez Terminal, connecting it to the existing UPRR railroad tracks south of Waterfront Road. As discussed, the proposed project would not interfere with existing UPRR operations, including frequency, capacity, and reliability of trains traveling on this line. In addition, operation of the proposed project would not affect existing rail traffic. As such, implementation of the proposed project would not preclude the City from improving the quality and availability of local bus and light rail service or expanding the regional rail network. Therefore, the proposed project would not conflict with these strategies.

Source: Metropolitan Transportation Commission and Association of Bay Area Governments, Plan Bay Area 2050, October 2021.

Table 3.10-2: Project Consistency with Circulation Element of the General Plan

Applicable Goal and Policies	Project Consistency Analysis
Goal C-G-2: Maintain and/or improve mobility in the City by considering alternative circulation system improvements beyond those identified within Table 6-3 Planned Major Improvements that increase system capacity and are found acceptable to the City, its residents, and where applicable, Caltrans or other agency.	
Policy C-P-2.2: Strive to reduce total vehicle miles traveled (VMT) by City residents by planning an efficient circulation system that complements existing and planned land uses, improves access to alternative transportation modes for bicycle, pedestrian, and transit users, and provides more direct routes to City and regional destinations.	**Consistent.** The proposed project would result in a continuation of the existing industrial use of the site and would not conflict with the intended use of the project site or with surrounding land uses. The proposed project would reestablish the former rail line on the south side of the existing Martinez Terminal, connecting it to the existing UPRR railroad tracks south of Waterfront Road. Operation of the proposed project would not interfere with existing UPRR operations or access to its facilities. In addition, there are no bicycle or pedestrian facilities located in the vicinity of the project site; thus, the proposed project would not affect such facilities. Implementation of the proposed project would not preclude the City from promoting safe and uncongested neighborhoods, energy conservation, reduction of air and noise pollution, and access to bicycle, pedestrian, and transit facilities. In addition, as detailed under Threshold TRA-2 below, based on the methodology provided in the County Guidelines, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts related to VMT would be less than significant. Therefore, the proposed project would not conflict with these policies.
Policy C-P-2.3: Ensure compatibility and complementary relationships between the circulation system and existing and planned land uses, promoting environmental objectives such as safe and uncongested neighborhoods, energy conservation, reduction of air and noise pollution, and access to bicycle, pedestrian, and transit facilities.	
Goal C-G-7: Maintain and update street standards for design, construction and maintenance of “Complete Streets.” When constructing or modifying transportation facilities, strive to provide for a balanced system for the movement of vehicles, commercial trucks, alternative and low emissions vehicles, transit and its users, bicyclists, pedestrians, children, persons with disabilities, and seniors appropriate for the road classification and adjacent land use.	

Table 3.10-2: Project Consistency with Circulation Element of the General Plan

Applicable Goal and Policies	Project Consistency Analysis
Policy C-P-7.2: Design and implement "Complete Streets" that enable safe, comfortable and attractive access for all users – pedestrians, motorists, bicyclists, and transit riders of all ages and abilities – in a manner that is compatible with and complementary to adjacent development and promotes connectivity between complementary land uses. New development projects must contribute to or construct transit facilities where the project would induce or increase demand on nearby arterial and collector streets, as determined through a Transportation Impact Analysis funded and completed by the project applicant.	**Consistent.** As detailed below under Threshold TRA-2, the proposed project would generate or attract fewer than 110 daily vehicle trips and would meet the screening criterion for a "small project". In meeting the screening criterion, according to the County Guidelines, a full transportation impact analysis with VMT calculation would not be required. Additionally, as further discussed under Threshold TRA-2 below, the proposed project would result in the addition of four daily vehicle trips over existing conditions. This would be a nominal increase that would not induce or increase demand on nearby arterial and collector streets. Therefore, implementation of the proposed project would not be subject to Section 22.25 of the Martinez Municipal Code and payment of transportation impact fees would not be required. Therefore, the proposed project would not conflict with this policy.
Goal C-G-9: Provide complete streets integrating a comprehensive transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, children, youth and families.	
Policy C-P-9.1: Review street construction, development projects and utility projects to identify opportunities to implement complete streets.	**Consistent.** As described above, the proposed project would result in a continuation of the existing industrial use of the site and would not conflict with the intended use of the project site or with surrounding land uses. The proposed project would reestablish the former rail line on the south side of the existing Martinez Terminal, connecting it to the existing UPRR railroad tracks south of Waterfront Road. The project would not interfere with the existing UPRR Mococo Rail Line, which provides service to 15 trains daily, 13 of which are commuter trains and two of which are freight trains. In addition, as project operations would not require transportation via trucks or use of roadways, the proposed project would not affect the roadways in the vicinity of the project site, including Waterfront Road and Interstate 680. As such, the proposed project would not preclude the City from implementing complete streets. Therefore, the proposed project would not conflict with this policy.
Goal C-G-11: Promote the safe and efficient movement of goods with minimum disruptions to residential areas.	
Policy C-P-11.3: Continue industrial expansion in the north industrial area to minimize the neighborhood impacts of truck movements.	**Consistent.** The project site is located in the northern portion of the City and is designated IM for industrial and manufacturing uses in the City's General Plan 2035 and zoned H-I (Heavy Industrial) in the City's Zoning Code. The project site is not located adjacent to or in the immediate vicinity of residential uses; the nearest residential uses are located approximately 3,550 feet (0.67 mile) to the south of the project site. The proposed project would result in a continuation of the existing industrial use
Policy C-P-11.5: Require new development and roadway projects to provide and maintain railroad crossings that include safety measures, such as grade separations for major thoroughfares, improving existing	

Table 3.10-2: Project Consistency with Circulation Element of the General Plan

Applicable Goal and Policies	Project Consistency Analysis
at-grade crossings, and/or providing adequate lighting, signage, and fencing.	of the site and would not conflict with the intended use of the project site or with surrounding land uses. Operation of the proposed project would not require transportation via trucks or use of roadways. In addition, the proposed project would comply with all applicable safety regulations for rail-related development. Therefore, the proposed project would promote the safe and efficient movement of goods with no disruptions to residential areas, and the proposed project would not conflict with these policies.
Policy C-P-11.6: Study the feasibility of establishing Railroad Quiet Zones to improve neighborhood quality of life for residents who live in the vicinity of railroad at-grade crossings.	**Consistent.** As detailed in Section 3.9, Noise, of this EIR, the nearest sensitive residential receptor are single-family residences located approximately 3,550 feet (0.67 mile) to the south of the project site. As discussed in the construction noise analysis contained in Section 3.9 of this EIR, with adherence to the City's noise ordinance, noise impacts from construction activities associated with the proposed project would be less than significant. During operation, the proposed project would not add train trips to the existing operations on the UPRR track, and no substantial new stationary noise sources are anticipated. New vehicle trips would be generated from the two additional employees required for project operations. However, noise generated from two employees' commute trips would be nominal. As such, the proposed project would not increase operational noise levels compared to existing conditions, and such impacts would be less than significant. Therefore, the proposed project would not conflict with this policy.

Source: City of Martinez, General Plan Circulation Element, November 2022.

Based on the detailed analysis provided in Table 3.10-1 and Table 3.10-2, the proposed project would promote the safe and efficient movement of goods and would not impede upon or preclude the maintenance and improvement of the existing transit and roadway system. As such, the proposed project would be consistent with the goals, strategies, and policies of Plan Bay Area 2050 and the City's General Plan Circulation Element. Therefore, operation of the proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit and roadways, and impacts would be less than significant.

TRA-2 Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

As described above and according to the County Guidelines, certain projects that meet established screening criteria based on size, location, proximity to transit, or trip-making potential may be presumed to have a less than significant transportation impact under CEQA and do not require a full detailed VMT analysis. In regard to the County's VMT screening criteria, the project site is not located within 0.5 mile of an existing major transit stop or along a high-quality transit corridor; the project site is not located within a Low VMT Area; and the project site is not a public facility or government building that would generate trips. Therefore, the proposed project would not meet the three related screening criteria.

The trip generation resulting from the proposed project was calculated in order to determine whether the project would meet the "small project" size criterion. Reestablishment of the rail spur and storage of railcars would require an additional two employees when compared to existing conditions, resulting in a total of 18 employees at the site. As the Institute of Transportation Engineers' (ITE) Trip Generation Manual 11th Edition does not include trip generation rates for terminal rail projects, the proposed project's trip generation was based on the addition of two employees with two daily vehicle trips per employee (one inbound trip and one outbound trip per day). Using these parameters, the proposed project would be estimated to generate approximately four daily trips (two AM peak hour trips and two PM peak hour trips). As such, the proposed project would generate or attract fewer than 110 daily vehicle trips and would meet the screening criterion for a "small project". As such, pursuant to the County Guidelines, a full transportation impact analysis with VMT calculation would not be required. Therefore, based on the methodology provided in the County Guidelines, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and VMT impacts would be less than significant.

TRA-3 Would the project increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Construction

As previously discussed, construction of the proposed project would involve excavation, grading, soil compaction, and installation of the railroad track and other site improvements. Construction equipment, vehicles, and materials would be transported to and from the project site using local roadways. As such, as part of the proposed project's construction BMPs, a TCP would be developed and implemented prior to construction for all locations where construction activities would affect the existing transportation system. The TCP will outline temporary speed limit restrictions and define the use of flaggers, warning signs, lights, barricades, and cones, etc., according to standard guidelines required by the City. Construction activities completed within public street ROWs would require the use of a traffic control service, and any lane closures or traffic control measures would be consistent with those published in the California Joint Utility Traffic Control Manual in order to facilitate safe passage of construction and private vehicles. Additionally, as discussed under Threshold TRA-1, the proposed project would be required to undergo CPUC review in accordance with General Order 88-B: Modifications of an Existing Rail Crossing prior to construction. The GO 88-B form and proposed modifications would be reviewed and agreed upon by the CPUC, road authority, and UPRR. Adherence to existing permitting requirements would ensure that construction of the proposed project would not result in hazardous geometric design features. Therefore, the proposed project would not increase hazards due to geometric design features during construction, and such impacts would be less than significant.

Operation

The proposed project would result in a continuation of the existing industrial use of the site and would not conflict with the intended use of the project site or with surrounding land uses. The proposed rail spur would connect to the existing UPRR Mococo Rail Line and no changes to the configuration of this line would be required. Additionally, the required CPUC review prior to construction would ensure that the design of the proposed project would not include hazardous geometric features. Operation of the proposed project would not affect existing rail traffic, as the cars would be added to one of the two existing local freight trains currently operating in the area.

The freight trains would continue to operate during nighttime hours, consistent with existing operations. In addition, as operation of the proposed project would not involve transportation via trucks or use of roadways, such as Waterfront Road and Interstate 680, the proposed project would not involve modifications to existing roadway configurations. Furthermore, the proposed project would comply with all applicable safety regulations for rail-related development. Therefore, the proposed project would not increase hazards due to geometric design features or incompatible uses during operation, and such impacts would be less than significant.

3.10.5 Mitigation Measures

No mitigation measures are required.

3.10.6 Level of Significance After Mitigation

Impacts related to transportation would be less than significant.

3.10.7 Cumulative Impacts

Similar to the proposed project, the three related projects, which are located more than 1 mile from the project site, would be separately reviewed and approved by the City to ensure their consistency with applicable programs, plans, ordinances, and policies, including, but not limited to, Plan Bay Area 2050 and the City's General Plan Circulation Element. Impacts to pedestrian and bicycle facilities are largely project-specific, and as discussed above, the proposed project would not impact such facilities. Furthermore, the proposed project would result in a continuation of the existing industrial use of the site and would not conflict with the intended use of the project site or with surrounding land uses. Therefore, project impacts related to consistency with identified plans and policies addressing the circulation system would not be cumulatively considerable, and cumulative impacts would be less than significant.

The proposed project is screened out from further VMT analysis and presumed to have a less than significant impact related to VMT. Therefore, the proposed project would not contribute to a cumulatively considerable VMT impact.

With implementation of the TCP, the proposed project would not increase hazards due to geometric design features during construction. During operation of the proposed project, the reestablishment of the rail service to the project site would not affect existing rail traffic, as the new train cars would be added to one of the two existing local freight trains currently operating in the area. In addition, as operation of the proposed project would not involve transportation via trucks or use of roadways such as Waterfront Road and Interstate 680, the proposed project would not involve modifications to existing roadway configurations. As such, project impacts related to hazards due to geometric design features or incompatible uses would not be cumulatively considerable, and cumulative impacts would be less than significant.

3.11 TRIBAL CULTURAL RESOURCES

This section addresses the proposed project's potential impacts relative to tribal cultural resources. By statute, "tribal cultural resources" are generally described as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are further defined in Public Resources Code (PRC) Section 21074. The analysis in this section is based on: the *Cultural Resources Identification Memorandum for Martinez Terminal Rail Restoration Project, City of Martinez, Contra Costa County, California* (Cultural Resources Memo), prepared by Michael Baker International, dated February 2025 (Appendix D); *Supplemental Cultural Resource Study, TransMontaigne Railroad Spur Project Martinez, Contra Costa County, California*, prepared by LSA, dated January 2025 (see Attachment 2 of Appendix D); and correspondence with Native American tribes in response to consultation requirements.

3.11.1 Regulatory Setting

Federal

American Indian Religious Freedom Act

The American Indian Religious Freedom Act establishes, as national policy, that traditional Native American practices, beliefs, sites (including the right of access) and the use of sacred objects shall be protected and preserved. It does not include provisions for compliance.

National Register of Historic Places

Properties which are listed in or have been formally determined eligible for listing in the National Register of Historic Places (NRHP) are automatically listed in the California Register of Historic Places (CRHR). The NRHP was established by the National Historic Preservation Act of 1966 as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify cultural resources and indicate what properties should be considered for protection from destruction or impairment." The NRHP recognizes properties that are significant at the national, State, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it meets one or more of the following criteria:

- Criterion A (events): It is associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B (persons): It is associated with the lives of persons significant in our past; or
- Criterion C (architecture): It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D (information potential): It has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting at least one of the above designation criteria, resources must also retain integrity, or enough of their historic character or appearance to be "recognizable as historical resources and to convey the reasons for their significance." The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined in the following manner:

- Location: The place where the historic property was constructed or the place where the historic event occurred; or
- Design: The combination of elements that create the form, plan, space, structure, and style of a property; or
- Setting: The physical environment of a historic property; or
- Materials: The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property;
- Workmanship: They physical evidence of the crafts of a particular culture or people during any given period in history or prehistory; or
- Feeling: The property's expression of the aesthetic or historic sense of a particular period of time; or
- Association: The direct link between an important historic event or person and a historic property.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

California Register of Historical Resources

The CRHR is an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (PRC Section 5024.1[a]). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (PRC Section 5024.1[b]). Certain properties are determined by the statute to be automatically included in the CRHR by operation of law, including California properties formally determined eligible for, or listed in, the NRHP. Properties are eligible for listing in the CRHR if they meet one or more of the NRHP criteria listed above (i.e., Criterion A [events] through Criterion D [information potential]).

In addition, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a] and [b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Criterion 1: Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or
- Criterion 2: Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Criterion 3: Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Environmental Quality Act

PRC Section 21074(1) defines tribal cultural resources as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either (1) included or determined to be eligible for inclusion in the CRHR or (2) included in a local register of historical resources as defined in PRC Section 5020.1(k), defined as a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

According to PRC Section 21084.3, public agencies must, when feasible, avoid damaging effects to any tribal cultural resource. If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, the following example mitigation measures can be considered to avoid or minimize the significant adverse impacts:

1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    a. Protecting the cultural character and integrity of the resource.
    b. Protecting the traditional use of the resource.
    c. Protecting the confidentiality of the resource.
3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
4) Protecting the resource.

CEQA Guidelines Section 15064.5 further specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures include the following provisions: (1) protect such remains from disturbance, vandalism, and inadvertent destruction; (2) establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and (3) establish the Native American Heritage Commission as the authority to resolve disputes regarding disposition of such remains.

Native American Heritage Commission

PRC Section 5097.91 established the Native American Heritage Commission (NAHC), the duties of which include inventorying places of religious or social significance to Native Americans and identifying known graves and cemeteries of special religious or social significance to Native

Americans. The NAHC records the historical territories of state-recognized tribes in a database called the Sacred Lands File. PRC Section 5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

California Native American Historical, Cultural and Sacred Sites Act

The California Native American Historical, Cultural and Sacred Sites Act applies to both state and private lands. This act requires that upon discovery of human remains, construction or excavation activity cease and the county coroner notified. If the remains are of a Native American, the coroner must notify the NAHC. The NAHC then notifies the persons most likely to be descended from the Native American remains. This act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

Assembly Bill 52

Assembly Bill (AB) 52, known as the Native American Historic Resource Protection Act, requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with a proposed project's geographic area, if they have requested to be notified, in order to include California tribes in determining if a proposed project may result in significant impacts to tribal cultural resources. The requirements of AB 52 have been codified in PRC Sections 21080.3.1, 21080.3.2, and 21082.3.

Consultation with Native American tribes may include, but is not limited to, discussion of the type of environmental review necessary, the significance of the tribal cultural resources, the significance of a proposed project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. Mitigation measures agreed upon must be included in the environmental document. Consultation is considered concluded when the parties agree to measures to avoid or reduce a significant impact on a tribal cultural resource, or when a party concludes that mutual agreement cannot be reached. If no formal agreement on the appropriate mitigation has been established, mitigation measures that avoid or substantially lessen potential significant impacts should be implemented.

California Native American Graves Protection and Repatriation Act

This state law was established to complement and extend the provisions of the federal Native American Graves Protection and Repatriation Act, providing specific guidelines and procedures for the handling of Native American cultural items and human remains in the state of California. The California Native American Graves Protection and Repatriation Act reflects the state's commitment to respecting and preserving the cultural heritage of Native American tribes in the state.

California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097

California Health and Safety Code Section 7050.5, and PRC Sections 5097.94 and 5097.98 outline procedures to be followed in the event human remains are discovered during the course of California projects. If human remains are encountered, all work must stop at that location and the County Coroner must be immediately notified and advised of the finding. The County Coroner would investigate "the manner and cause of any death" and make recommendations concerning treatment of the human remains. The County Coroner must make their determination within two working days of being notified. If the human remains are determined to be Native American, the County Coroner shall contact the California Native American Heritage Commission. The Commission would immediately notify those persons it believes to be most likely descendants,

and would request the descendants to inspect the site and make recommendations for the disposition of the discovered human remains.

Public Resources Code Section 5097.5(a)

PRC Section 5097.5(a) specifies that a person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, or archaeological sites, which can include fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

Local

City of Martinez Municipal Code

City of Martinez Municipal Code Chapter 22.47, Historic Resource Provisions, establishes the framework for the preservation of structures and districts which significantly contribute to the cultural and architectural heritage of the City. The provisions of this Chapter apply Citywide.

City of Martinez General Plan

The General Plan's Historic, Cultural, and Arts Element contains goals, policies, and implementation measures regarding cultural resources throughout the City. Goals and policies relevant to the proposed project include the following:

- **Goal HCA-G-1:** Foster protection, preservation, and rehabilitation of Martinez's historic and cultural heritage.
    - Measure HCA-I-1.1f: Avoid or mitigate to the maximum feasible extent impacts of development on Native American archaeological and cultural resources.
    - Measure HCA-I-1.1g: Require a historical, cultural and archaeological survey prior to approval of any project where a known historic, archaeological, or other cultural resource is located, where there is a structure more than 50 years old, which would require excavation in an area that is known to be sensitive for cultural or archaeological resources, or is on land that has not been significantly disturbed previously. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures identified by a qualified professional shall be implemented, such as avoidance, capping of the resource site, or documentation and conservation, to reduce adverse impacts to the resource.
    - Measure HCA-I-1.1h: Require all new development, infrastructure, and other ground disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources, archaeological resources, or human remains:
        a) If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the City shall be notified, and the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protections and preservation measures. Work may only resume when appropriate protections recommended by the qualified professional are in place and have been approved by the City.

b) If human remains are discovered during any ground disturbing activity, work shall stop until the City and the Contra Costa County Coroner have been contacted and, if the remains are determined to be of Native American origin, consult with the Native American Heritage Commission for applicable State laws and codes, including identifying the most likely descendants for consultation on appropriate measures and special circumstances. Work may only resume when appropriate measures have been taken and approved by the City.

- Policy HCA-P-1.5: Avoid damaging effects to any tribal cultural resource when feasible.
- Policy HCA-P-1.6: Treat any Native American and human remains with cultural dignity when discovered during development or otherwise.
- Policy HCA-P-1.10: Comply with State and federal laws to preserve and protect archaeological resources by complying with assessment and recovery of the resources.

3.11.2 Environmental Setting

Prehistoric Period

As described in Section 3.3, Cultural Resources, of this EIR, archaeological data indicates that human occupation in California occurred during the Early Holocene (11,500 - 7,000 years before present). Archaeological sites from this period are rarely encountered in the Bay Area due to sea level rise and the fact that old sites tend to be deeply buried. In the Middle and Late Holocene, population density and cultural diversity increased, leaving more archaeological sites.

One of the first specific archaeological chronologies developed for Central California, including Contra Costa County and the Bay Area, consists of broad periods defined by shifts in adaptive patterns that may reflect environmental changes and the movement and influences of pre-contact and post-contact indigenous groups. It was defined by three periods: Paleoindian period (10,000 - 6000 BC); Archaic period (6000 BC - AD 500), which is divided into Lower Archaic (6000 - 3000 BC), Middle Archaic (3000 - 1000 BC) and Upper Archaic (1000 BC - AD 500) periods; and Emergent period. Each period is further defined by spatial and cultural units called patterns, phases, and aspects. Patterns are units of culture having similar economic and technical manifestations, mortuary patterns, concepts of wealth, and trade practices.

Paleoindian Period

The Paleoindian period in California is typically dated between approximately 13,550 and 10,550 years before present. Archaeological evidence of Paleoindian sites indicated hunting adaptation characterized by large, fluted projectile points and hunting of megafauna and other faunal resources for inland sites. Fluted projectile points throughout California indicate that Paleoindians at least traveled through the region, but few stratified sites of this culture have been found. Due to climate change during the Holocene, periods of erosion and deposition have altered large segments of the Pleistocene landscape.

Early people along the coast, dubbed “Paleocoastal” cultures, subsisted by hunting marine mammals, fishing, and collecting shellfish. Sites from this period and culture occur along the coasts and offshore islands, representing a significant watercraft technology required to reach them. Materially, sites are composed of shell middens with lithic bifaces, crescents, and barbed

projectile points. As is the case in much of California, very few sites of this period are known in the region of the North Coast Ranges.

Archaic Period

Several sites in Contra Costa County date to the Lower Archaic period and typically contain artifacts consistent with a mobile hunting and gathering economy. Mobile foragers appeared to have resided in camps situated along marshes and on grasslands and took advantage of a wide array of resources available in the surrounding uplands on a seasonal basis. The artifacts found in archaeological sites dating to this period include large, wide-stemmed projectile points, cobble tools, handstones, and milling slabs. The ubiquity of artifact styles through space indicates a high degree of generalization compared to the more specialized assemblages of those practicing low residential mobility seen in latter periods.

Mobile foragers in the Bay Area region during the Middle Archaic period resided in camps situated along marshes and on grasslands and used the surrounding uplands for resources on a seasonal basis, albeit on a more limited basis. The Middle Archaic period was also marked by new groundstone technology and increased trade, evidenced by cut marine shell beads found within mortuary contexts. Formalized exchange relationships appear to have been established in the flake stone industry as well. Mortars and pestles first appear in sites dating to this period, which is thought to signal an increased dietary reliance on acorns rather than hard seeds and an associated increase in sedentism.

The Upper Archaic period was characterized by cooler conditions and increased precipitation in northern and central California, which resulted in more favorable conditions for human occupation. Upper Archaic traits typically include tightly flexed burials, with fewer grave offerings and no preference toward orientation. When present, burial artifacts typically include *Olivella* saddle and saucer beads and *Haliotis* pendants. These sites are also characterized by utilitarian objects, numerous mortars, and pestles, implying greater reliance on acorns and a highly developed bone tool industry. One of the best documented Bay Area archaeological sites is the Tamien Station site, located in the City of San Jose. The site yielded a diverse archaeological assemblage including human burials, shell beads and pendants, projectile points, bone whistles and awls, and steatite tobacco pipes and plummets. The specialized nature of these artifact assemblages seems to indicate a high degree of sedentism.

Emergent Period

The Emergent period is thought to be associated with a new level of sedentism, status ascription, ceremonial integration, and regional trade, as indicated by the presence of finished artifacts and food remains that could not be obtained locally; this is referred to as the Augustine pattern.

There appears to have been a diversity of socioeconomic strategies associated with Augustine pattern sites, with some sites revealing a continuance of sedentary systems initiated during the Upper Archaic and others resulting from mobile foraging adaptations. New ornament forms and technologies emerged, such as the bow and arrow, toggle harpoon, hopper mortar, clamshell disk beads, and steatite and magnesite beads and tubes. This period was marked by wide-ranging changes in *Olivella* bead forms and their distribution patterns. The *Olivella* saucer bead trade network appears to have collapsed suddenly between AD 430 and 1050, and the *Olivella* saucer bead industry was replaced by more regionally integrated shell bead forms, such as *Olivella* wall beads and clamshell disk beads, possibly indicating the increased importance of communicating cultural affiliation within an increasingly populated region. The manufacture of clamshell disk beads seems to have centered primarily on the Santa Rosa Plain and within the Napa Valley.

Clamshell disk beads were used as exchange currency with a standardized value. The burial practice of cremation was also introduced in the North Bay during this time. These shifts in technology, artifact types, and mortuary practices, which mainly spread throughout the San Francisco Bay area from north to south, indicate that another upward cycle of regional integration occurred in the Emergent period. However, this cycle was stopped short by the Contact period, which is marked by the Spanish settlement of the region. The effects of European-introduced epidemics significantly affected Native American populations and culture.

At the time of Spanish intrusion into California, the vicinity of the proposed project was occupied by a group known to descendant communities and anthropologists as the Ohlone (formerly known as the Costanoans). The basic unit of Ohlone political organization was the tribelet, consisting of one or more villages and varying numbers of associated camps. The Ohlone occupied the California coast stretching from the San Francisco Bay to Monterey Bay and into the lower Salinas Valley. The Ohlone are a group of ethnically diverse peoples who traditionally spoke more than 50 related languages that together formed a sub-family of the Utian language family. Specifically, the area, including what is now the City of Martinez, was occupied by the Karkin, or Carquin.

The most important plant food of the Ohlone was the acorn, which was processed in mortars and made into mush or acorn bread much as it had been for centuries. Other plant foods were also eaten raw and cooked. A number of plant seeds were roasted by placing and tossing them alongside live coals in basketry trays. Mammals, reptiles, and birds were hunted using bows and arrows, generally with stone or bone arrowheads, and nets were used for both trapping and fishing. Tule watercraft were used for transportation, hunting, and fishing. The Ohlone were adept basket makers, and baskets were used for a variety of purposes, including food storage and preparation.

The Karkin populations were reduced by disease and relocation to Spanish missions, where many died or were consolidated with other Native American groups.[1]

Historic Period

Spanish explorers first visited the coast of southern California in 1542. But European settlement did not begin in the area until 1769, when Gaspar de Portola led an exploratory mission intended to open up Alta California to settlement. In 1776, the Spanish established the Presidio de San Francisco and the Mission San Francisco de Asis on the San Francisco Peninsula. The project site falls within the jurisdiction of Mission San Francisco.

In 1821, Mexico won its independence from Spain. The new state was secular in nature and moved increasingly toward secularization of the mission and dispersal of the mission properties among politically connected elites. In 1834, the missions began to be secularized and their lands divided up. In 1844, Governor Manuel Micheltorena granted 13,293 acres, including the project site, to William (Guillermo) Welch, a naturalized Mexican citizen born in Ireland. Welch's land grant was called Rancho las Juntas. An adjacent land grant, Rancho Pinole, had been made in 1842 to Ygnacio Martinez.

From 1846 to 1848, the United States and Mexico fought the Mexican-American War. Northern California was soon seized by Americans living in California and then by the United States military itself. In 1847, Robert Semple contracted with Mariano Guadalupe Vallejo to establish the first ferry in the Bay Area, which connected Benicia and what became Martinez.

[1] City of Martinez, *General Plan 2035, Historic, Cultural, and Arts Element,* adopted November 2, 2022.

California was ceded to the United States at the closure of the Mexican-American War. The discovery of gold in California in 1848 almost immediately led to a population boom that continued through the 1850s and 1860s. In 1849, the Martinez family subdivided a part of the Rancho Pinole and established Martinez, which was designated the seat of Contra Costa County in 1851.

In 1877, the California Pacific Railroad constructed a line from Roseville to Oakland. The railroad passed through Martinez before taking a rail ferry from Port Costa. In 1885, the railroad was leased to the Southern Pacific Railroad, which purchased it outright in 1898. The railroad allowed for the industrial development of Martinez. In 1930, the railroad ferry was replaced with a railroad bridge. The Southern Pacific Railroad merged with the Union Pacific Railroad on September 11, 1996.

The deep-water harbor and rail connections drew the petroleum industry to Martinez. In 1915, Shell Oil established a refinery in Martinez, after which Associated Oil followed with one near Martinez. The petroleum industry fostered Martinez's growth in the twentieth century.

Buried Archaeological Resources Sensitivity

There is low sensitivity for buried archaeological resources in the center of the project site due to past development and disturbances. Sensitivity is similarly low at the surface at the east and west ends of the project site due to past disturbances but increases with depth.

The rise in the center of the project site is mapped as Upper Great Valley Sequence Cretaceous sandstone and massive sandstone. These rocks are greater than 65 million years old and therefore are too old to contain archaeological deposits. The soil in this part of the project site is mapped as Alamont clay, 15 to 30 percent slopes. As described in the Cultural Resources Memo, the A horizon of these deposits (i.e., topsoil), which extends up to 14 inches below the surface, has the potential to contain archaeological deposits if undisturbed. The shallow deposits, which have the potential to include archaeological resources, are likely to be disturbed.

The Holocene-age Bay Mud clay is present in the east and west boundaries of the project site and is coterminous with human occupation of the region. These soils are often very deep, with the H horizon (soil layer containing organic material) in a typical profile greater than 60 inches thick, and have the potential to cover archaeological resources. Buried resources may include those flooded by estuaries due to sea level rise. One notable site on the San Francisco Peninsula, CA-SFR-220, is submerged and buried beneath 10 to 12 feet of Bay Mud; it is approximately 7,900 years old and is the oldest known archaeological site in the San Francisco Peninsula. Soils close to the surface, within the first 3 feet below ground surface, throughout the project site are anticipated to be disturbed due to past railroad construction, road construction, and the construction of the Martinez Terminal facility and associated utilities trenching. However, deeper Holocene estuary deposits have a moderate to high potential for buried archaeological resources.

3.11.3 Methodology

The evaluation of the proposed project's potential to result in a significant impact related to tribal cultural resources is based on the resource identification efforts and tribal consultation, as described below.

Cultural Resources Inventory

Records Search

A literature search of the Northwest Information Center of the California Historical Resources Information System was conducted on September 8, 2021, to identify previous cultural and tribal cultural resources studies and previously recorded cultural and tribal cultural resources within a half-mile radius of the project site.

In addition to these records searches, the NRHP, Built Environment Resources Directory (BERD) for Contra Costa County, and the California Historical Resources were consulted. The BERD directory includes built resources reviewed for eligibility by the California State Historic Preservation Office (SHPO) for the National Register and the California Historical Landmarks programs through federal and state environmental compliance laws, and built resources nominated under federal and state registration programs, including the National Register, CRHR, California Historical Landmarks, and California Points of Historical Interest. The California Historical Resources directory includes resources listed in the National Register, CRHR, California State Landmarks, and California Points of Historical Interest.

Previous Cultural Resources Studies

Eighteen cultural resources studies have previously been completed within 0.5 mile of the project site. Three of these overlapped the project site. In addition to the documents filed at the NWIC, LSA completed two additional reports for the project site (see Attachment 2 of Appendix D).

Previously Recorded Cultural Resources

A total of five cultural resources are documented within 0.5 mile of the project site. Of these, one resource partially intersects the project site, P-07-000500, the Southern Pacific-Northern Contra Costa Route, Segment SPN-7. This resource consists of a single set of railroad tracks and associated railroad spur tracks. The resource was first evaluated as part of the Mojave Natural Gas Pipeline, Northern Expansion Project. The resource was found not eligible for inclusion in the National Register due to a lack of integrity. The resource was revisited in 2021, at which time it was found that the portion of the spur track connecting it to the main track had been removed. The resource was again evaluated and found not eligible for inclusion in the National Register.

Sacred Land Files Results

A literature search of the Native American Heritage Commission (NAHC) Sacred Lands File was conducted to identify previous cultural and tribal cultural resources studies and previously recorded cultural and tribal cultural resources within a half-mile radius of the project site. The NAHC Sacred Lands File search was conducted on October 5, 2021; the result of the search was negative.

Surveys

As described in the Cultural Resources Memo, a pedestrian survey was conducted in October 2021 and included the main railroad track and ROW, the area between the ROW and Waterfront Road at the east end of the project site, the abandoned railroad spur and adjacent access road stretching northwest of the main track, and the wetland area west of the spur road. The survey was conducted in approximately five-meter-wide transects. Only that portion of the project site where piping would be installed from the railcar unloading area to the bulk storage tanks was not surveyed. However, that portion of the project site is completely developed with no ground

visibility. In addition, a supplemental archaeological survey was conducted in November 2024, and a supplemental built environment survey was conducted in January 2025, in order to examine additions to the project site not included in the initial survey.

Two cultural resources were identified as a result of the surveys. Isolate LSA-TMO2101-I-1 is a solarized (amethyst) glass bottle fragment with a tooled finish. P-07-000500, the Southern Pacific – Northern Contra Costa Route, Segment SPN-7, consists of railroad tracks and associated spur railroad track.

Tribal Consultation

On May 15, 2024, and May 22, 2024, the City sent formal tribal consultation notification letters to the following Native American tribes, which were identified by the NAHC as possibly having knowledge of cultural resources in the project site:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Chicken Ranch Rancheria of Me-Wuk Indians
- Guidiville Indian Rancheria
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- North Valley Yokuts Tribe
- The Confederated Villages of Lisjan
- The Ohlone Indian Tribe
- Tule River Indian Tribe
- Wilton Rancheria
- Wuksache Indian Tribe/Eshom Valley Band

To date, two tribes provided responses to the City's notification letters. In their letter dated May 22, 2024, the Amah Mutsun Tribal Band of Mission San Juan Bautista recommended that a Sacred Lands File search and California Historical Resource Information Systems search be conducted for the proposed project, as well as Cultural Sensitivity Training, archaeological monitoring, and Native American monitoring at the project site during ground-disturbing activities. On May 23, 2024, the Confederated Villages of Lisjan requested copies of the California Historical Resources Information System search and EIR for the proposed project, Sacred Lands File search, and any additional archaeological reports prepared for the proposed project. The City responded to these two tribes on March 19, 2025, and provided the requested information. Further consultation between the City and the Confederated Villages of Lisjan occurred on March 26, 2025, which is reflected in this section.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the proposed project related to tribal cultural resources are based on Appendix G of the CEQA Guidelines. Based on Appendix G of the CEQA Guidelines, a project would have a significant impact related to tribal cultural resources if it would cause a substantial adverse change in the significance of a tribal cultural resource,

defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.11.4 Impact Analysis

TCR-1 Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Construction

As discussed above in Subsection 3.11.3, no prehistoric sites or resources documented to be of specific Native American origin have been previously recorded within the records search area of the project site. Therefore, there are no tribal cultural resources that are listed or eligible for listing in the CRHR or in a local register of historical resources within a 0.5-mile radius of the project site. As such, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource listed in the CRHR or a local register of historical resources. Therefore, no impact associated with construction of the proposed project would occur.

Operation

Operation of the proposed project would not require ground-disturbing activities that would have the potential to impact tribal cultural resources. Therefore, no impact associated with operation of the proposed project would occur.

TCR-2 Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Construction

As described in Chapter 2, Project Description, site preparation activities would include excavation and grading of existing soil. The maximum depth of construction related excavation

would be approximately 16 feet below the ground surface, with average excavation depths for track areas being 5 feet below the ground surface. As presented above in Subsection 3.11.3, while the project site is located within the traditional territory of the Ohlone group, the results of the records searches (i.e., NWIC and NAHC) demonstrate that there is no record or evidence of known tribal cultural resources on the project site or in its immediate vicinity. Tribal consultation conducted by the lead agency with the Amah Mutsun Tribal Band of Mission San Juan Bautista and the Confederated Villages of Lisjan has also not resulted in identification of known tribal cultural resources within the project site. Moreover, the project site has been subject to considerable development in the past and is currently developed with the existing Martinez Terminal property and UPRR ROW. However, the archaeological resources sensitivity analysis identified moderate to high sensitivity for deeper excavations in the Bay Mud located at either end of the project site, as previously described in Section 3.11.2. As such, there is potential for tribal cultural resources to be inadvertently discovered.

Accordingly, implementation of Mitigation Measure TCR-A, which outlines the procedures for a Worker Environmental Awareness Program specifically related to tribal cultural resources, would be required to inform the construction crew of procedures related to inadvertent discovery of tribal cultural resources during ground-disturbing activities. The construction crew associated with ground-disturbing activities would be informed of tribal cultural resources' values and the regulatory protections afforded to those resources. Mitigation Measure TCR-A would also require that the initial training be conducted by an on-site Native American monitor and can be incorporated into the proposed project's construction safety training or in conjunction with the Worker Environmental Awareness Program for Archaeological Resources (refer to Mitigation Measure CUL-A in Section 3.3, Cultural Resources, of the Draft EIR). Additionally, Mitigation Measure TCR-B, would require that a Native American monitor be present during ground-disturbing activities in all areas with potential to contain significant tribal cultural resources, including the east and west side of the project site, where geologic maps indicate Holocene deposits exist.

If potential tribal cultural resources are encountered during ground-disturbing activities, Mitigation Measure TCR-C would require that all work within 100 feet be halted until the consulting tribes are notified of the findings and make recommendations. Additionally, while not anticipated due to the level of past disturbance within the project site, if human remains are found, the proposed project would be required to comply with State of California Health and Safety Code Section 7050.5, PRC Section 5097, and General Plan implementation Measure HCA-I-1.1h(b), ensuring proper treatment of all human remains. Furthermore, Mitigation Measure TCR-D would require that the consulting tribes, regardless of whether they are designated most likely descendant, shall be given the opportunity to comment on the treatment plan and be informed of findings and establishes procedures for reburial if human remains of Native American origin are encountered during construction.

With adherence to existing regulations and implementation of Mitigation Measures TCR-A through TCR-D, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency to be significant pursuant to criteria set forth in PRC Section 5024.1(c). Therefore, construction impacts to tribal cultural resources would be less than significant with implementation of mitigation.

Operation

Operation of the proposed project would not require ground-disturbing activities that would have the potential to impact tribal cultural resources. Therefore, no impact associated with operation of the proposed project would occur.

3.11.5 Mitigation Measures

To reduce potential significant impacts related to tribal cultural resources, the proposed project would implement Mitigation Measures TCR-A through TCR-D would be implemented during construction.

TCR-A **Tribal Cultural Resources Worker Environmental Awareness Plan:** Due to the potential to encounter unanticipated resources, prior to the beginning of ground-disturbing activities by the construction crew, the construction crew associated with ground-disturbing activities shall be informed of the tribal cultural resource's values involved and of the regulatory protections afforded those resources. The crew shall also be informed of procedures relating to the discovery of unanticipated resources that require evaluation as potential tribal cultural resources.

The crew shall be cautioned not to collect artifacts, and directed to inform a construction supervisor and the onsite Native American monitor in the event that tribal cultural resources are discovered during the course of construction.

The initial training shall be conducted by the on-site Native American monitor and can be incorporated into the proposed project's construction safety training or in conjunction with the Worker Environmental Awareness Program for Archaeological Resources. The on-site monitor shall administer supplemental briefing to all new construction personnel, prior to their commencement of earth-moving construction activities.

TCR-B **Tribal Cultural Resources Monitoring:** Due to the potential to encounter unanticipated resources, Native American monitoring shall be conducted by a qualified Native American monitor representing tribes traditionally and culturally affiliated with the geographic area as identified by the Native American Heritage Commission. The qualified Native American monitor shall be present for all ground-disturbing activities that have the potential to encounter tribal cultural resources. Ground-disturbing activities include, but are not limited to, geotechnical boring, boring, trenching, grading, and excavating. The Native American monitor shall observe ground-disturbing activities in all areas with potential to contain significant tribal cultural resources. These locations are anticipated to include the east and west side of the project site, where geologic maps indicate Holocene deposits exist. The tribal cultural monitor shall observe ground-disturbing activities, maintain logs of all activities monitored, and will make documentation available to the City and all consulting Native American parties who request a record of the logs. If the tribal monitor determines the sensitivity for tribal cultural resources is low, then monitoring may be reduced or eliminated at the discretion of the tribal monitor in consultation with the consulting tribes.

TCR-C Tribal Cultural Resources Inadvertent Discovery: If resources of potential Native American origin are identified as a result of excavations, or if other resources identified by the Native American monitor as potentially having tribal significance are located in the course of proposed project's excavations, all work within 100 feet be halted until the consulting tribes are notified of the findings and make recommendations. Native American materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). If the resource is considered significant by the consulting tribes, then the City shall determine the resource constitutes a tribal cultural resource, and avoidance shall be the preferred means of treatment. If avoidance is not feasible then the City shall determine mitigation measures as appropriate in consultation with the qualified archaeologist and consulting tribes.

TCR-D Human Remains Inadvertent Discovery: If human remains are encountered during ground disturbing activities, all work within 100 feet of the remains shall be halted and the County Coroner notified immediately. If human remains are found, the consulting tribes, regardless of whether they are designated most likely descendant, shall be given the opportunity to comment on the treatment plan and informed of findings. If human remains are determined to be of Native American origin, there shall be no pictures taken or testing done on Native American human remains. Tribal representatives will rebury the Native American human remains and associated funerary objects with the appropriate dignity either in accordance with the recommendations of the most likely descendent, if available, or in the project vicinity at a location agreed upon between the tribe and the City, where the reburial would be accessible to tribal members in perpetuity and would not be subject to further disturbance. The discovery and reburial shall be kept confidential and secure to prevent any further disturbance.

3.11.6 Level of Significance After Mitigation

Implementation of Mitigation Measures TCR-A through TCR-D would ensure that impacts related to tribal cultural resources during construction would be less than significant.

3.11.7 Cumulative Impacts

Impacts to tribal cultural resources are typically site specific, and cumulative impacts would occur if a series of actions led to the loss of a resource. The records searches conducted for the proposed project did not identify the project site or any of the related projects listed in Table 3-1, Related Projects, as historical resources or tribal cultural resources. Moreover, similar to the proposed project, related projects would be required to comply with State of California Health and Safety Code Section 7050.5, PRC Section 5097, and General Plan implementation Measure HCA-I-1.1h(b), ensuring proper treatment of all human remains. In the event that tribal cultural resources are uncovered, each related project would be required to comply with the applicable regulatory requirement and/or mitigation as deemed appropriate. In addition, related projects would be required to comply with the consultation requirements of AB 52 to determine and mitigate any potential impacts to tribal cultural resources. Therefore, each project's potential impact on tribal cultural resources would be limited and would not combine to cause a cumulatively considerable effect on tribal cultural resources.

CHAPTER 4
OTHER CEQA CONSIDERATIONS

This chapter addresses additional environmental effects required to be considered in an EIR pursuant to Sections 15126 and 15128 of the CEQA Guidelines, including a summary of the impacts found to be less than significant; significant and unavoidable impacts; significant irreversible environmental changes; growth-inducing impacts; and a discussion of any potential secondary effects associated with identified mitigation measures.

4.1 Impacts Found to be Less Than Significant

Section 15128 of the CEQA Guidelines states that an EIR shall contain a brief statement indicating reasons that various possible significant effects of a project were determined not to be significant and not discussed in detail in the EIR. The significance thresholds used to evaluate the impacts of the proposed project are based on Appendix G of the CEQA Guidelines. Several issues were eliminated from further review during preparation of the Initial Study, which is included as Appendix A to this EIR. Through the Initial Study, the City determined that the proposed project would not result in significant impacts related to aesthetics, agriculture and forestry resources, air quality (sensitive receptors and other emissions), biological resources (habitat and natural community conservation plans), geology and soils (Alquist-Priolo Earthquake Fault Zones and alternative wastewater disposal systems), hazards and hazardous materials (hazardous emissions near schools, hazards near airports, emergency response/evacuation plans, and wildland fires), hydrology and water quality (groundwater supplies), land use and planning, mineral resources, noise (airport noise), population and housing, public services, recreation, transportation (emergency access), utilities and service systems, and wildfire.

4.1.1 Aesthetics

According to the City of Martinez General Plan Update EIR, scenic vistas in the City include views of Mount Diablo, Alhambra Valley, Carquinez Strait Shoreline, and other areas.[1] Although the project site is located within the vicinity of the Carquinez Strait, the proposed project would reestablish a former rail line at the existing Martinez Terminal, within an area already heavily characterized by rail and industrial development. Thus, the proposed project would not have a substantial adverse effect on views of the Carquinez Strait compared to existing conditions, and impacts would be less than significant.

According to the California Scenic Highway Mapping System administered by Caltrans, there are no officially designated State Scenic Highways in the vicinity of the City.[2] There are two officially designated scenic highway corridors in Contra Costa County: Interstate 680, from the Alameda County line to the junction with State Route 24; and State Route 24 from the east portal of the Caldecott tunnel to Interstate 680 near Walnut Creek.[3] Neither of these officially designated

[1] City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022, available at: https://www.cityofmartinez.org/home/showpublisheddocument/2716/637955490203230000, accessed November 22, 2024.

[2] California Department of Transportation, California State Scenic Highway System Map, available at: https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa, accessed November 22, 2024.

[3] California Department of Transportation, California State Scenic Highway System Map, available at: https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa, accessed November 22, 2024.

scenic highway corridors provide views of the City or the immediate surrounding areas. Therefore, no impact related to scenic resources within a state scenic highway would occur.

The project site is located within an urban area that is developed with industrial uses but also contains undeveloped lands and tidelands. The project site is designated IM for industrial and manufacturing uses in the City's General Plan 2035 and zoned H-I in the City's Zoning Code. The H-I Zone allows for petroleum and petroleum products refining including gasoline, kerosene, naphtha, and oil; petroleum products storage; and railroad freight stations, repair shops, and yards. The project site is also zoned ECD Zone because of its location near the Carquinez Strait. The proposed project would adhere to the standards of the ECD Zone, which aims to preserve scenic quality. Furthermore, the proposed project would reestablish a former rail line within an area that has existing railroad and industrial uses, and thus, would not change the uses on-site, or conflict with the existing zoning or regulations governing scenic quality. Therefore, impacts related to consistency with regulations governing scenic quality would be less than significant.

Construction activities would occur within the hours allowed by the City Noise Ordinance, and temporary construction lighting that may be needed after sunset within those hours would be focused on the construction zone. Upon completion of construction activities, there would be no permanent, new sources of light and glare installed as part of the proposed project. Therefore, the proposed project would not create a new source of light or glare that would adversely affect day or nighttime views and the impact would be less than significant.

Based on the above, the proposed project would result in no impacts or less than significant impacts related to aesthetics, and further analysis of this topic is not warranted in this Draft EIR.

4.1.2 Agriculture and Forestry Resources

Based on the California Department of Conservation's California Important Farmland Finder, the project site and surrounding area are not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[4] Additionally, the project site and surrounding area are not zoned for agricultural use, forestland, timberland, or timberland production, or under a Williamson Act contract.[5] Therefore, the proposed project would have no impacts related to agriculture and forestry resources.

4.1.3 Air Quality (Sensitive Receptors and Other Emissions)

The project site is located in an industrial area that is surrounded by extant, remnant, and former marshlands and wildlife areas. No sensitive uses and groups (i.e., receptors) are located adjacent to the project site or in the surrounding area. As such, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Such impacts would be less than significant.

Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. Although not anticipated, potential odors from these sources would be localized and generally confined to the immediate area surrounding the project site. The proposed project

[4] California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, California Important Farmland Finder, available at: https://maps.conservation.ca.gov/DLRP/CIFF/, accessed November 22, 2024.

[5] California Department of Conservation, Division of Land Resource Protection, Williamson Act, Reports and Statistics, Williamson Act Enrollment Finder, available at: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/, accessed November 22, 2024.

would be implemented utilizing standard construction techniques and odors would be typical of most construction sites, would be temporary in nature, and would not persist beyond the termination of construction activities. Additionally, the Bay Area Air Quality Management District (BAAQMD) regulates and requires abatement of certain nuisance odors and has established odor screening thresholds for land uses that have the potential to generate substantial odor complaints (i.e., wastewater treatment plants, landfills or transfer stations, food manufacturing, and chemical plants). None such uses would be developed as part of the proposed project. Operation of the proposed project would continue to involve the storage and transportation of petroleum and renewable products and related feed and blend stocks, similar to existing uses at the site. Therefore, impacts related to odors would be less than significant.

4.1.4 Biological Resources (Habitat and Natural Community Conservation Plans)

The only applicable conservation plan in Contra Costa County is the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, which does not coincide with the City of Martinez, or the project site.[6] Therefore, no impact related to such plans would occur with implementation of the proposed project.

4.1.5 Geology and Soils (Alquist-Priolo Earthquake Fault Zones and Alternative Wastewater Disposal Systems)

The project site is not located within a state-designated Alquist-Priolo Fault Hazard Zone. The Concord Valley Fault is the closest fault zone to the project site, located approximately one mile east of the project site. The proposed project does not include the construction of any habitable structures, nor would the use of the project site change following implementation of the proposed project. Thus, implementation of the proposed project would not increase the risk at the project site associated with known faults. The proposed project would be constructed in accordance with the latest version of the California Building Code and other applicable federal, state, and local codes associated with seismic criteria. Compliance with existing regulations would ensure that impacts related to fault rupture would be less than significant.

No septic tanks or alternative wastewater disposal systems are included as part of the proposed project. Therefore, no impact associated with the use of such systems would occur.

4.1.6 Hazards and Hazardous Materials (Hazardous Emissions Near Schools, Hazards Near Airports, Emergency Response/Evacuation Plans, Wildland Fires)

The closest school to the project site is Las Juntas Elementary School, located at 4105 Pacheco Boulevard, approximately 1.3 miles south of the project site. Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, and no impact would occur.

The City does not contain any airport facilities. Although residents are subject to small aircraft overflights from operations at Buchanan Field Airport in the eastern area of the City, the project site would not be located within the safety zones of Buchanan Field Airport. Therefore, no impact would occur related to safety hazards or excessive noise for people residing or working in the project area within an airport land use plan.

Martinez Terminal facility has an existing emergency response plan and spill prevention plan that would be updated to include the project site and operations associated with the proposed project.

[6] California Department of Fish and Wildlife, April 2019, Natural Community Conservation Plans Map.

As part of the emergency response plan and spill prevention plan, project personnel would have available adequate spill containment and cleanup resources on-site at all times and be prepared to contain, control, clean up, and dispose of any potential fuel spill quickly and completely. As the existing Martinez Terminal adheres to the City's Emergency Operations Plan, the proposed project also would be required to adhere to the plan. Additionally, during construction, the proposed project would establish a Traffic Control Plan (TCP) and coordinate with Contra Costa County Fire Protection District (CONFIRE) to maintain adequate emergency processes. Therefore, impacts related to emergency response or evacuation plans would be less than significant.

The project site and surrounding area are not located within a Fire Hazard Severity Zone in a State Responsibility Area, as defined by the California Department of Forestry and Fire Protection.[7] Furthermore, the project site and surrounding area are not located within a Very High Fire Hazard Severity Zone in a Local Responsibility Area, according to the City of Martinez General Plan Update EIR.[8] As such, no impacts related to risk of wildland fires would occur.

4.1.7 Hydrology and Water Quality (Groundwater Supplies)

The City currently has no active groundwater well sources. All of the City's raw water supply is from surface water provided by the Contra Costa Water District's Contra Costa Canal. The City has no major groundwater production facilities for water supply, and there are no major groundwater basins underlying the City. Thus, the proposed project would use surface water sources and would not use or decrease groundwater supplies, and no impact to groundwater supplies or recharge would occur.

4.1.8 Land Use and Planning

The project site is located in an industrial area that is surrounded by extant, remnant, and former marshlands and wildlife areas. There are no residential uses or established communities at the project site or in the surrounding area. Additionally, the proposed project would reestablish a rail spur from the existing Union Pacific Railroad tracks into the existing Martinez Terminal property on a previously established alignment. Therefore, the proposed project would not physically divide an established community, and no impact would occur.

The project site is designated IM for industrial and manufacturing uses, zoned H-I (Heavy Industrial), and also zoned ECD Zone. No changes to the existing land use designation are required or proposed with the project. The proposed project would result in a continuation of the existing industrial use of the site and would not conflict with the intended use of the project site or with surrounding land uses. Therefore, the proposed project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and no impact would occur.

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7 California Department of Forestry and Fire Protection, Fire and Resource Assessment Program, Fire Hazard Severity Zone Viewer, available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008, accessed November 22, 2024.

8 City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022, available at: https://www.cityofmartinez.org/home/showpublisheddocument/2716/637955490203230000, accessed November 22, 2024.

4.1.9 Mineral Resources

According to the California Geological Survey's Updated Mineral Land Classification Map, the project site is located within lands classified mineral resource zone MRZ-4 (i.e., areas of unknown mineral resource potential).[9] Additionally, the project site does not contain any oil wells, and no oil extraction occurs within the project site.[10] The project site does not currently involve mineral extraction activities, and no such activities are included as part of the proposed project. Therefore, the proposed project would not result in impacts related to mineral resources.

4.1.10 Noise (Airport Noise)

As previously discussed, the City does not contain any airport facilities, and the project site is not located within the safety zones of Buchanan Field Airport.[11] Therefore, no impact would occur related to excessive noise for people residing or working in the project area.

4.1.11 Population and Housing

Given the temporary nature of construction industry jobs, the relatively large regional construction industry, and the relatively nominal total number of construction workers needed during any construction phase, the labor force from within the region would be sufficient to complete project construction without an influx of new workers and their families. Therefore, construction of the proposed project would not directly induce population growth. In addition, the proposed project does not include the construction of new homes, businesses, or changes to existing land uses on-site. The new track would extend the existing rail infrastructure; however, the proposed project would allow the operational functionality historically available and permitted at the site to be restored. Implementation of the proposed project would not result in a net increase in the annual throughput of products handled and stored at the Martinez Terminal. Rather, the volume of products that would be transported to and from the facility via the reestablished rail spur would offset the volume of products that are currently transported via pipeline or wharf. Thus, the proposed project would not generate new population growth. Although the proposed project would result in the addition of two employees above existing conditions for a total of 18 employees, this increase in employee population would be relatively nominal and the new employees would be anticipated to come from the region. Therefore, there would be no substantial direct or indirect increases in population growth resulting from project implementation. Impacts would be less than significant.

The project site is currently developed with industrial uses and does not contain any housing. Therefore, the proposed project would not involve the removal or relocation of any housing and therefore, would not displace any people or necessitate the construction of any replacement housing. No impact would occur.

4.1.12 Public Services

The proposed project would be subject to current fire code and CONFIRE requirements for emergency access. Additionally, during construction of the proposed project, notice to and

[9] California Department of Conservation, 2013, Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma, and Southwestern Solano Counties, California.

[10] California Department of Conservation, Geologic Energy Management Division's (CalGEM) Well Finder, available at: https://maps.conservation.ca.gov/doggr/wellfinder/, accessed November 22, 2024.

[11] City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022, available at: https://www.cityofmartinez.org/home/showpublisheddocument/2716/637955490203230000, accessed November 22, 2024.

coordination with the Martinez Police Department (MPD) would be ongoing and emergency access to the project site would be maintained. Active construction areas would be fenced and would remain secured outside of work hours. Additionally, compliance with fire code standards would be ensured through plan review with CONFIRE and would minimize hazards to life and property in the event of a fire. The existing Martinez Terminal has existing security measures, including security guards, nighttime lighting, and fencing, that would also apply to the proposed project. The existing emergency response plan and spill prevention plan that covers the Martinez Terminal would be updated to include the project site and operations associated with the proposed project. In addition, as the proposed project does not propose new land uses, new housing, or businesses that would substantially increase the residential or employee populations in the area, the onsite demand for fire and police protection services would not substantially increase. Therefore, the proposed project would not require the construction of additional fire or police protection facilities or expansion of existing facilities. Impacts related to fire and police protection would be less than significant.

As previously described, the proposed project does not include development of any residential uses. Construction and operation of the proposed project would not generate a substantial number of new permanent residents that would increase the demand for schools, parks, recreational facilities, and other public facilities (e.g., libraries, community centers, and wellness centers). Therefore, impacts would be less than significant.

4.1.13 Recreation

Operation of the proposed project would result in the addition of two employees at the site, which represents a nominal increase that would not result in a substantial increase in the demand for recreational facilities. Therefore, substantial physical deterioration of parks and recreational facilities would not occur or be accelerated with implementation of the proposed project. Impacts would be less than significant. Additionally, the proposed project would not induce growth that could require the construction or expansion of recreational facilities. Therefore, no impact would occur.

4.1.14 Transportation (Emergency Access)

For construction of the proposed project, a TCP would be developed and implemented for the proposed project with approval from the City. The TCP would define the use of flaggers, warning signs, lights, barricades, cones, etc., according to standard guidelines required by the City. Traffic control would be maintained at the project site at all times, and construction activities completed within public street rights-of-way would require the use of a traffic control service. Any lane closures, if required, or traffic control measures would be consistent with those published in the California Joint Utility Traffic Control Manual, facilitating safe passage of both construction vehicles and private vehicles. Furthermore, notice to and coordination with emergency service providers, including the CONFIRE and MPD, would be ongoing regarding the construction schedule and the TCP so as to coordinate emergency response routing and maintain emergency access. Implementation of the proposed project includes the reestablishment of a defunct rail spur, which would not impact the existing roadways utilized for emergency access. As such, emergency access to the proposed project would remain similar to existing conditions. Therefore, construction and operation of the proposed project would result in less than significant impacts related to inadequate emergency access.

4.1.15 Utilities and Service Systems

Although the proposed project would result in the construction of a new stormwater drainage system, the comprehensive stormwater drainage and secondary containment system would

ensure rail loading and unloading operations do not pose a risk to water quality. Furthermore, drainage from the proposed rail spur would also enter the facility's existing drainage system. As such, the proposed project would not require the construction of new stormwater drainage facilities that would result in a physical impact to the environment. Impacts related to stormwater drainage facilities would be less than significant.

The Contra Costa Water District's water supply within the City's water service area is expected to meet water demand through 2045 with the implementation of water contingency planning efforts. Water deliveries would be reduced during multiple dry years from Contra Costa Water District. As such, the City has adequate water supply to meet projected demand through 2040 during normal, dry, and multiple dry years. Moreover, the proposed project's addition of two employees during operation would not result in substantial additional water demand over existing conditions. Therefore, the proposed project would not require the construction of new water facilities that would result in a physical impact to the environment; and the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. Impacts related to water supply and infrastructure would be less than significant.

The proposed project would continue to be provided sanitary sewer service by the Central Costa Contra Sanitary District through its wastewater collection and treatment system, similar to existing conditions. As the proposed project would result in a nominal increase of employees and no change in the types of uses or operations on-site, the proposed project would not result in substantially greater wastewater collection and treatment demand than the current operations at the project site. Furthermore, the proposed project would not require the construction of new wastewater facilities that would result in a physical impact to the environment. Therefore, impacts related to wastewater generation and infrastructure would be less than significant.

No electric power, natural gas, or telecommunications facilities would be relocated, constructed, or expanded as a result of the proposed project. No impact would occur related to these facilities.

During construction, the proposed project would generate solid waste from demolition and excavation activities. However, the proposed project is required to comply with the Martinez Municipal Code including Chapter 8.16 (Solid Waste Management), Chapter 8.18 (Source Reduction and Recycling), and Chapter 8.19 (Construction and Demolition Debris Recycling) that aim to reduce the amount of solid waste being diverted to the landfill. The proposed project would also incorporate the source reduction techniques and recycling measures in accordance with California Assembly Bill 939 and CALGreen, which requires that at least 65 percent of nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. During operation, as the employee population would only increase by two additional employees, the proposed project would not significantly increase the amount of solid waste already generated by the existing terminal. Solid waste would continue to be disposed of at the Contra Costa Transfer Station and/or the Keller Canyon Landfill. According to the City of Martinez General Plan Update EIR, the City's increase in solid waste generation resulting from the new growth associated with the General Plan Buildout is within the daily permitted capacity of the Keller Canyon landfill. Therefore, the existing landfills would have sufficient capacity to accommodate the relatively minor amounts of waste that would be generated by the proposed project, and the proposed project would comply with all applicable federal, state, and local solid waste regulations. Impacts related to solid waste would be less than significant.

4.1.16 Wildfire

The project site is not located in or near a Local or State Responsibility Area or lands classified as Very High Fire Hazard Severity zones.[12,13] Therefore, the proposed project would have no impacts related to wildfires.

4.2 Significant and Unavoidable Impacts

CEQA Guidelines Section 15126.2(c) requires that an EIR describe any significant impacts which cannot be avoided. Specifically, Section 15126.2(c) states:

> *Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.*

As evaluated in Sections 3.1 through 3.11 of this EIR, all impacts associated with the proposed project would be less than significant or less than significant with mitigation incorporated. Therefore, no significant and unavoidable impacts would result from implementation of the proposed project.

4.3 Significant Irreversible Environmental Changes

According to CEQA Guidelines Sections 15126(c) and 15126.2(d), an EIR is required to address any significant irreversible environmental changes that would occur should the project be implemented. As stated in CEQA Guidelines Section 15126.2(d):

> *Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter likely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.*

4.3.1 Use of Nonrenewable Resources

Implementation of the proposed project would necessarily consume limited, slowly renewable, and nonrenewable resources. This consumption would occur during the construction phases of the project and continue throughout its operational lifetime. Construction of the proposed project would require a commitment of resources that are non-replenishable or may renew so slowly as to be considered nonrenewable. These resources may include the following construction supplies: certain types of lumber and other forest products; aggregate materials used in concrete and asphalt, such as sand, gravel and stone; metals, such as steel, copper, and lead; petrochemical construction materials, such as plastics; and water. Nonrenewable fossil fuels, such as gasoline

[12] California Department of Forestry and Fire Protection, Fire and Resource Assessment Program, Fire Hazard Severity Zone Viewer, available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008, accessed November 22, 2024.

[13] City of Martinez, Community Development Department, Draft Environmental Impact Report for the Martinez General Plan Update, October 2022, available at: https://www.cityofmartinez.org/home/showpublisheddocument/2716/637955490203230000, accessed November 22, 2024.

and oil, would also be consumed in the use of construction vehicles and equipment, as well as the transportation of goods and people to and from the project site. However, use of such resources would not be unusual compared to other construction projects and would not substantially affect the availability of such resources.

As analyzed in Section 3.4, Energy, of this EIR, construction of the proposed project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. Some energy conservation would occur through compliance with State requirements that heavy-duty diesel equipment not in use for more than five minutes must be turned off. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. During operation, the proposed project does not propose any unusual features that would result in excessive long-term fuel consumption. The proposed project would not add train trips compared to the existing conditions and would result in nominal operational fuel consumption generated from the addition of two employees. While the existing natural gas and electricity infrastructure would be extended to connect to the railcars stored on the reestablished operating tracks, such connections would not expand the capacity of the natural gas and electricity infrastructure at the Martinez Terminal property. Furthermore, the proposed new steam generator would employ more efficient heating technology than the current heating system. As concluded in Section 3.4, Energy, the proposed project would not cause wasteful, inefficient, and unnecessary consumption of energy resources.

Water, an important natural resource, is not considered to be a nonrenewable resource. Water is regularly replenished by the natural hydrological cycle. As discussed in Section 4.1.15 above, the Contra Costa Water District's water supply within the City's water service area is expected to meet water demand through 2045 with the implementation of water contingency planning efforts. Water deliveries would be reduced during multiple dry years from Contra Costa Water District. As such, the City has adequate water supply to meet projected demand through 2040 during normal, dry, and multiple dry years. Moreover, the proposed project's addition of two employees during operation would not result in substantial additional water demand.

4.3.2 Extension of Roads and Other Infrastructure

As detailed in Chapter 2, Project Description, the proposed project would reestablish a former rail line on the south side of the existing Martinez Terminal in the City of Martinez, connecting to the existing Union Pacific Railroad tracks south of Waterfront Road. The rail spur would be located within the existing Martinez Terminal property and within Union Pacific Railroad right-of-way. The proposed project would include construction of approximately 3,850 linear feet of new track, with a lead track of approximately 1,900 feet, and three operating industry tracks of approximately 650 feet each. Implementation of the proposed project would reestablish rail service to the project site and would not involve transportation via trucks or use of roadways. The proposed project would not involve modifications to existing roadway configurations or require extension of roads.

As determined in the Initial Study (refer to Appendix A), implementation of the proposed project would require connections to existing water, wastewater, stormwater, and dry utilities infrastructure serving the Martinez Terminal property. Therefore, none of the required infrastructure connections would lead to new or expanded infrastructure service systems.

4.3.3 Potential Environmental Accidents

The use of hazardous materials during construction and operation of the project is evaluated in Section 3.7, Hazards and Hazardous Materials, of this EIR. As discussed therein, construction would include the temporary and limited use of hazardous materials, the storage, handling, and disposal of which would be regulated by the California DTSC, US EPA, and OSHA. These materials would be transported to the project site during construction and any hazardous materials that are produced as a result of construction would be collected and disposed of off-site in accordance with applicable federal, State, and local regulations and disposed of at a Class I landfill. In addition, spill prevention and containment for construction of the proposed project would also adhere to the US EPA's guidance on Spill Prevention Control and Countermeasures. During operation, the existing emergency response plan and spill prevention plan that covers the Martinez Terminal would be updated to include the project site and operations associated with the proposed project, including provisions for spill containment and cleanup resources. As such, operation of the proposed project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

As also detailed in Section 3.7, Hazards and Hazardous Materials, of this EIR, due to the potential to encounter contaminated soils during grading and excavation activities, implementation of Mitigation Measure HAZ-A, requiring preparation of a project-specific soil management plan, and Mitigation Measure HAZ-B, requiring construction workers to minimize contact with contaminated soils through use of personal protective equipment, would be required to reduce potential impacts related to the handling of contaminated soils. Furthermore, the project applicant would be required to prepare a HASP pursuant to OSHA requirements. The proposed project would also be required to comply with TCSA lead abatement regulations and BAAQMD Regulation 11, Rule 1, regarding lead standards, monitoring and recording, and emission limits. Although excavated soils would be stored within the Martinez Terminal property and would not be exported, if the excavated soils are removed from the property in the future, additional soil testing would be required, as outlined in Mitigation Measure HAZ-C. If the excavated soils are removed from the Martinez Terminal property in the future, the handling, transport, and disposal of potentially contaminated soils would be conducted in accordance with all applicable hazardous waste criteria determined appropriate based on additional soil testing. With adherence to existing regulatory requirements and implementation of Mitigation Measures HAZ-A, HAZ-B, and HAZ-C, impacts related to encountering contaminated soils would be less than significant. Therefore, it is not expected that implementation of the proposed project would cause irreversible damage from environmental accidents associated with the proposed project.

4.3.4 Justification for Irretrievable Commitment of Resources

Implementation of the proposed project would require an investment of both renewable and nonrenewable resources. The amount of resources that would be committed to development of the proposed project would be typical of similar developments of this size and scale. However, as analyzed in Section 3.4, Energy, of this EIR, the proposed project would not involve wasteful or inefficient energy consumption during construction or long-term operation. Furthermore, none of the building materials anticipated for buildout of the proposed project would be unique, rare, in short supply, or require creation of new resource extraction sites or new manufacturing and delivery channels. Implementation of the proposed project would also satisfy the project objectives identified in Chapter 2, Project Description, of this EIR, which include increased functionality of operations and use of existing rail transportation methods and storage infrastructure. Based on these considerations, the irretrievable commitment of renewable and nonrenewable resources is justified.

4.4 Growth Inducing Impacts

CEQA Guidelines Section 15126.2(e) requires an EIR to discuss the ways a proposed project could foster economic or population growth or the construction of additional housing, directly or indirectly, in the surrounding environment. Growth-inducing impacts include the removal of obstacles to population growth (e.g., the expansion of a wastewater treatment plant allowing more development in a service area) and the development and construction of new service facilities that could significantly affect the environment individually or cumulatively. In addition, pursuant to CEQA, growth must not be assumed as beneficial, detrimental, or of little significance to the environment. Growth can be induced by (1) direct growth associated with a project, and (2) indirect growth created by demand not satisfied by a project or the creation of surplus infrastructure not utilized by a project.

As discussed in Section 4.1.11 above, the proposed project's addition of two employees would be nominal, and the new employees would be anticipated to come from the region. Additionally, as discussed in Section 4.1.15, implementation of the proposed project would require connections to existing water, wastewater, stormwater, and dry utilities infrastructure serving the Martinez Terminal property, and none of the required infrastructure connections would lead to new or expanded infrastructure service systems in the area. Furthermore, as discussed in Chapter 2, Project Description, implementation of the proposed project would not increase the storage capacity of the Martinez Terminal from existing conditions. Rather, the volume of products arriving at the project site via the proposed new rail spur would offset the volume of products currently arriving via barge or pipeline. Therefore, there would be no substantial direct or indirect increases in population growth resulting from project implementation, and the proposed project would not result in growth-inducing impacts.

4.5 Potential Secondary Effects

CEQA Guidelines Section 15126.4(a)(1)(D) requires the effects of mitigation measures to be discussed, albeit in less detail than the significant effects of the project, if the mitigation measure(s) would cause one or more significant effects in addition to those that would be caused by implementation of the project as proposed.

4.5.1 Biological Resources

The analysis of the proposed project's impacts related to special-status plant species and special-status wildlife species, which is addressed in Section 3.2, Biological Resources, of this Draft EIR, resulted in the following recommended mitigation measures:

BIO-A Prior to construction, and during the appropriate blooming periods for special-status plant species with the potential to occur within the project site, a qualified biologist shall have conducted focused rare plant surveys across the entire project site following 2018 California Department of Fish and Wildlife (CDFW) and/or 2001 California Native Plant Society (CNPS) guidelines to determine presence or absence of special-status plant species. The surveys shall be floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity) and include site visits covering early, mid, and late-blooming season species.

If populations of special-status plants are found during the survey and they are located within permanent or temporary impact areas, avoidance and minimization measures shall be explored to protect the special-status plant population(s). If avoidance is not possible, consultation with CDFW shall be required prior to project initiation to identify

suitable compensatory mitigation for the unavoidable loss of these species. Preparation of a Habitat Mitigation and Monitoring Plan (HMMP) detailing relocation, salvage, and/or restoration of impacted species and subsequent maintenance and monitoring; payment of an in-lieu fee to an agency approved mitigation bank; or acquisition of off-site lands to be held in a restrictive deed for perpetuity would be required to compensate for the loss of habitat occupied by any non-listed special-status plant species found on-site. In the unlikely event a State or federally listed plant species is present and avoidance is not feasible, consultation with CDFW and/or U.S. Fish and Wildlife Service (USFWS) would be required prior to initiating any on-site project activities to coordinate any take permits pursuant to State and/or federal regulations and requisite compensatory mitigation.

BIO-B Prior to the start of project construction, a qualified biologist shall be identified and serve as the lead biological monitor to ensure that impacts to all biological resources are minimized or avoided, and shall conduct (or supervise) pre-construction field surveys for species that may be avoided, affected, or eliminated as a result of vegetation removal, grading, or any other project activities. The lead biological monitor shall ensure that all surveys are conducted by qualified personnel and that they possess all necessary permits and memoranda of understanding with the appropriate agencies for the handling of potentially occurring special-status species. The lead biological monitor shall also ensure that daily monitoring reports (e.g., survey results, protective actions, results of protective actions, adaptive measures, etc.) are prepared, and shall make these monitoring reports available upon request.

A qualified biologist shall present a Worker Environmental Awareness Program (WEAP) to all construction crews and contractors prior to starting any work on the project site. The WEAP training would include a review of the special-status species and other sensitive resources that could exist in the project area, the locations of sensitive biological resources as well as their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all personnel trained shall be maintained and submitted upon request.

Project limits shall be clearly delineated with fencing or other boundary markers prior to the start of construction. During construction, construction workers shall strictly limit their activities, vehicles, equipment, and construction materials to the designated construction limits and staging areas.

The biological monitor shall be present during vegetation removal and ground-disturbing activities to inspect and enforce mitigation requirements, conduct daily clearance surveys of work areas, and to relocate any species that may come into harm’s way to an appropriate offsite location of similar habitat. The biological monitor shall be authorized to stop specific grading or construction activities if violations of mitigation measures or any local, state, or federal laws are suspected. If ongoing biological monitoring of construction activities reveals the presence of any special-status wildlife within an active work area, then work shall be temporarily halted until the animals leave on their own volition or can be collected and relocated to areas outside of the designated work zones. Any non-listed special-status species occurring within the work area shall be collected and relocated to areas outside of the designated work zones. In the unlikely event a federal or State listed species is identified during surveys, no work shall be allowed within 500 feet of the species, and the appropriate trustee agencies (California Department of Fish and Wildlife or U.S. Fish and Wildlife Service) shall be consulted first

to determine an appropriate course of action. Upon completion of vegetation and earth disturbance activities, the biological monitor shall be available to conduct as needed spot checks during construction and respond to requests from project personnel as they arise to remove wildlife, answer any questions, and generally provide as-needed support to confirm project measures are implemented.

During construction, all equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas within the project limits. Equipment shall be checked daily for leaks prior to operation and repaired as necessary, and secondary containment shall be implemented during equipment and vehicle staging. During construction, the project limits shall be kept as clean of debris and trash as possible to avoid attracting predators of sensitive wildlife. Food-related trash items shall be kept in sealed containers and removed daily from the construction work zone.

BIO-C Proposed construction activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the nesting bird season, which generally runs from February 1 through August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. Depending on the avian species present, a qualified biologist may determine that a change in the breeding season dates is warranted.

If avoidance of the avian breeding season is not feasible, a qualified biologist with experience in conducting breeding bird surveys shall conduct two bird surveys, fourteen (14) days and no more than three (3) days, prior to project activities to detect protected birds occurring on-site and, as access to adjacent areas allows, other suitable habitats within 500 feet of the project site. If a protected bird is found, the project proponent may delay all project activities within 300 feet of on- and off-site suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist may continue the surveys to locate any nests. If an active nest is located, project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. A reduced buffer can be established if determined appropriate by the project biologist.

The biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor shall prepare and provide upon request monitoring reports during the grubbing and clearing of vegetation.

BIO-D The following measures shall be implemented to minimize construction impacts to protected wetlands:

- Project materials shall not be cast from the project site into nearby habitats; further, project-related debris, spoils, and trash shall be contained and removed to a proper disposal facility.
- All construction equipment shall be inspected and cleaned prior to use in the project footprint to minimize the importation of non-native plant material. All mulch, topsoil, and seed mixes used during post-construction landscaping activities and erosion control Best Management Practices shall be free of invasive plant species propagules. A weed abatement program shall be implemented should invasive plant species colonize the area within the project footprint post-construction.

Mitigation Measures BIO-A, BIO-B, BIO-C, and BIO-D would address impacts associated with special-status plant species and special-status wildlife species. Implementation of these mitigation measures improve, monitor, and improve the physical environment for biological resources. Thus, implementation of these mitigation measures would be beneficial in addressing the proposed project's impacts and would not result in adverse secondary impacts.

4.5.2 Cultural Resources

The analysis of the proposed project's impacts related to archaeological resources, which is addressed in Section 3.3, Cultural Resources, of this Draft EIR, resulted in the following recommended mitigation measure:

CUL-A **Worker Environmental Awareness Plan:** Prior to the beginning of the earth-moving construction activities, the construction crew shall be informed of the nature of cultural resources and the regulatory protections afforded those resources. The crew shall also be informed of procedures relating to the discovery of unanticipated resources. The crew shall be cautioned not to collect artifacts, and directed to inform a construction supervisor and the on-site archaeological monitor in the event that cultural resources or human remains are discovered during the course of construction, including when a cultural resources monitor is not present. The on-site monitor shall administer supplemental briefing to all new construction personnel, prior to their commencement of earth-moving construction activities.

CUL-B **Archaeological Resources Monitoring:** Archaeological monitoring for all ground-disturbing activities that have the potential to encounter archaeological resources shall be conducted by a qualified archaeological monitor who is working under the guidance of an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology (48 Federal Register 44738). Ground-disturbing activities include, but are not limited to, geotechnical boring, boring, trenching, grading, and excavating. The archaeological monitor shall observe ground-disturbing activities in all areas with potential to contain significant cultural deposits. These locations are anticipated to include the east and west side of the project site, where geologic maps indicate Holocene deposits exist. If, during the course of project excavations, the qualified archaeologist determines that archaeological sensitivity within the project site is low due to prior disturbances, then monitoring may be reduced or eliminated at the discretion of the qualified archaeologist.

CUL-C **Archaeological Resources Inadvertent Discovery:** In the event that any subsurface cultural resources are encountered during earth-moving activities, it is recommended that all work within 100 feet be halted until an archaeologist can evaluate the findings and make recommendations. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include wood, stone, or concrete footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, metal, glass, ceramics, and other refuse. The archaeologist will evaluate the find in accordance with federal, state, and local guidelines, including those set forth in the PRC Section 21083.2, to assess the significance of the find and identify avoidance or other measures as appropriate.

Mitigation Measures CUL-A, CUL-B, and CUL-C would address impacts associated with inadvertent discovery of archaeological resources during project construction. Implementation of these mitigation measures would not require physical changes to the environment beyond those otherwise evaluated in this Draft EIR. The mitigation measures establish procedures and require training to be conducted for construction personnel, and require archaeological monitoring during ground-disturbing activities. Thus, implementation of these mitigation measures would be beneficial in addressing the proposed project's impacts to archaeological resources and would not result in adverse secondary impacts.

4.5.3 Hazards and Hazardous Materials

The analysis of the proposed project's impacts related to creating a significant hazard to the public or the environment, which is addressed in Section 3.7, Hazards and Hazardous Materials, of this Draft EIR, resulted in the following recommended mitigation measures:

HAZ-A Prior to construction activities, a project-specific soil management plan shall be prepared that outlines soil management procedures and protocols for handling previously unidentified contaminated soils.

HAZ-B All construction personnel shall utilize personal protective equipment during grading, excavation, and all other activities involving the handling of soils to minimize contact with contaminated soils. Such equipment may include, but not be limited to, gloves, safety glasses or goggles, hard hats, coveralls, shoe covers, and respirators with HEPA filters.

HAZ-C If excavated soils stored within the Martinez Terminal property are removed from the site, additional lab testing of such soils for organochlorine pesticides, polychlorinated biphenyls, semivolatile organic compounds, asbestos, and any other constituent testing required by the receiving facility shall be conducted prior to soil removal.

Mitigation Measures HAZ-A, HAZ-B, and HAZ-C would address impacts associated with the potential release of hazardous materials and emissions into the environment during construction. Implementation of these mitigation measures would not require physical changes to the environment beyond those otherwise evaluated in this Draft EIR. The mitigation measures would involve a project-specific soil management plan, utilization of personal protective equipment, and lab testing. Thus, implementation of these mitigation measures would be beneficial in addressing the proposed project's impacts related to hazards and hazardous materials and would not result in adverse secondary impacts.

4.5.4 Tribal Cultural Resources

The analysis of the proposed project's impacts related to tribal cultural resources, which is addressed in Section 3.11, Tribal Cultural Resources, of this Draft EIR, resulted in the following recommended mitigation measure:

TCR-A **Tribal Cultural Resources Worker Environmental Awareness Plan:** Due to the potential to encounter unanticipated resources, prior to the beginning of ground-disturbing activities by the construction crew, the construction crew associated with ground-disturbing activities shall be informed of the tribal cultural resource's values involved and of the regulatory protections afforded those resources. The crew shall also be informed of procedures relating to the discovery of unanticipated resources that require evaluation as potential tribal cultural resources.

The crew shall be cautioned not to collect artifacts, and directed to inform a construction supervisor and the onsite Native American monitor in the event that tribal cultural resources are discovered during the course of construction.

The initial training shall be conducted by the on-site Native American monitor and can be incorporated into the proposed project's construction safety training or in conjunction with the Worker Environmental Awareness Program for Archaeological Resources. The on-site monitor shall administer supplemental briefing to all new construction personnel, prior to their commencement of earth-moving construction activities.

TCR-B **Tribal Cultural Resources Monitoring:** Due to the potential to encounter unanticipated resources, Native American monitoring shall be conducted by a qualified Native American monitor representing tribes traditionally and culturally affiliated with the geographic area as identified by the Native American Heritage Commission. The qualified Native American monitor shall be present for all ground-disturbing activities that have the potential to encounter tribal cultural resources. Ground-disturbing activities include, but are not limited to, geotechnical boring, boring, trenching, grading, and excavating. The Native American monitor shall observe ground-disturbing activities in all areas with potential to contain significant tribal cultural resources. These locations are anticipated to include the east and west side of the project site, where geologic maps indicate Holocene deposits exist. The tribal cultural monitor shall observe ground-disturbing activities, maintain logs of all activities monitored, and will make documentation available to the City and all consulting Native American parties who request a record of the logs. If the tribal monitor determines the sensitivity for tribal cultural resources is low, then monitoring may be reduced or eliminated at the discretion of the tribal monitor in consultation with the consulting tribes.

TCR-C **Tribal Cultural Resources Inadvertent Discovery:** If resources of potential Native American origin are identified as a result of excavations, or if other resources identified by the Native American monitor as potentially having tribal significance are located in the course of proposed project's excavations, all work within 100 feet be halted until the consulting tribes are notified of the findings and make recommendations. Native American materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). If the resource is considered significant by the consulting tribes, then the City shall determine the resource constitutes a tribal cultural resource, and avoidance shall be the

preferred means of treatment. If avoidance is not feasible then the City shall determine mitigation measures as appropriate in consultation with the qualified archaeologist and consulting tribes.

TCR-D **Human Remains Inadvertent Discovery:** If human remains are encountered during ground disturbing activities, all work within 100 feet of the remains shall be halted and the County Coroner notified immediately. If human remains are found, the consulting tribes, regardless of whether they are designated most likely descendant, shall be given the opportunity to comment on the treatment plan and informed of findings. If human remains are determined to be of Native American origin, there shall be no pictures taken or testing done on Native American human remains. Tribal representatives will rebury the Native American human remains and associated funerary objects with the appropriate dignity either in accordance with the recommendations of the most likely descendent, if available, or in the project vicinity at a location agreed upon between the tribe and the City, where the reburial would be accessible to tribal members in perpetuity and would not be subject to further disturbance. The discovery and reburial shall be kept confidential and secure to prevent any further disturbance.

Mitigation Measures TCR-A, TCR-B, TCR-C, and TCR-D would address impacts associated with inadvertent discovery of tribal cultural resources during project construction. Implementation of these mitigation measures would not require physical changes to the environment beyond those otherwise evaluated in this Draft EIR. The mitigation measures establish procedures and require training to be conducted for construction personnel, require Native American monitoring during ground-disturbing activities, and require that the consulting tribes, regardless of whether they are designated most likely descendant, shall be given the opportunity to comment on the treatment plan and be informed of findings and establish procedures for reburial if human remains of Native American origin are encountered. Thus, implementation of these mitigation measures would be beneficial in addressing the proposed project's impacts to tribal cultural resources and would not result in adverse secondary impacts.

CHAPTER 5
ALTERNATIVES

5.1 Introduction

Alternatives to the proposed project have been considered in this EIR to explore potential means to mitigate or avoid the significant environmental impacts associated with implementation of the project while still achieving the primary objectives of the project. Pursuant to Section 15126.6(a) of the CEQA Guidelines, an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. The CEQA Guidelines also state that an EIR need not consider every conceivable alternative or consider alternatives that are infeasible. Under CEQA, factors that can determine feasibility are site suitability, economic limitations, availability of infrastructure, consistency with applicable plans, regulatory limitations, and jurisdictional boundaries. An EIR should present a reasonable range of feasible alternatives that will support informed decision making and public participation regarding the potential environmental consequences of a project and possible means to address those consequences. An EIR need not consider alternatives whose effects cannot be reasonably ascertained and whose implementation is remote or speculative.

The alternatives analysis must also include a comparative evaluation of the No Project Alternative in accordance with CEQA Guidelines Section 15126.6(e) to determine the consequences of not implementing the project. Through the identification, evaluation, and comparison of alternatives, the relative advantages and disadvantages of each alternative compared with the proposed project can be determined.

5.1.1 Project Objectives

The overall purpose of the proposed project is to reestablish the rail spur and associated facilities at the project site to restore the Martinez Terminal to the operational functionality historically available and permitted at the site. Specific objectives related to the overall project purpose include the following:

- Implement facility improvements at the existing terminal to increase functional operational capacity at the project site.
- Minimize the need to extend existing product conveyance infrastructure (i.e., pipelines, pumping systems, etc.) by siting facilities in proximity to existing storage infrastructure.
- Limiting the amount of facility improvements required by relying on existing rail transportation methods.

5.2 Alternatives Development Process

In order to fulfill the project objectives, alternatives to the proposed project have been considered, including alternate design. Section 15126.6(f)(2) of the CEQA Guidelines requires that an EIR also consider alternative locations to the project site. Two alternate location alternatives have been considered, including alternative alignments and alternative sites.

The range of alternatives has been refined through the planning and engineering process for the proposed project to determine those alternatives that could be eliminated from further

consideration and those which would be carried forward for detailed analysis in this EIR. A discussion of the alternatives that were considered but ultimately dismissed and the reasons for their elimination are provided in Section 5.3 below. Section 5.4 summarizes the alternative that has been carried forward for detailed analysis in this EIR.

5.2.1 Summary of Proposed Project Impacts

Based on the environmental analysis conducted for the proposed project contained in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures of this EIR, potentially significant impacts that have been determined to require mitigation have been identified for:

- Biological Resources – construction-related impacts to special-status plant and wildlife species, nesting birds, sensitive natural communities, and protected wetlands.
- Cultural Resources – construction-related impacts to potential archaeological resources.
- Hazards and Hazardous Materials – construction impacts related to the handling and removal of potentially contaminated soils.
- Tribal Cultural Resources – construction-related impacts to potential tribal cultural resources.

The EIR identifies less than significant impacts for air quality, energy, geology and soils, greenhouse gas emissions, hydrology and water quality, noise, and transportation.

No significant and unavoidable impacts have been identified for implementation of the proposed project.

5.3 Alternatives Considered but Dismissed from Detailed Analysis

Section 15126.6(c) of the CEQA Guidelines requires that an EIR identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Among factors that may be used to eliminate alternatives from detailed consideration in the EIR are: (1) failure to meet most of the basic project objectives, (2) infeasibility, and (3) inability to avoid significant environmental impacts. The following alternatives were eliminated from further consideration in the EIR.

5.3.1 Alternate Design - Alternative Alignments

The proposed project involves constructing a rail spur from the existing UPRR tracks and extending into the Martinez Terminal property following the same alignment as the previous rail spur that historically served the project site. The eastern portion of proposed alignment would be located within the existing UPRR ROW, which travels beneath the Waterfront Road overpass. Due to the topography at this location, there is an elevation difference of approximately 20 feet between the existing UPRR ROW and the Martinez Terminal property. Changing the eastern portion of the proposed rail spur alignment, east of Waterfront Road, would require a significant increase in the length of lead track needed as well as considerably more intense construction activity to overcome the engineering challenges of raising a railroad track over the existing road ROW. Additionally, creating a railroad crossing over the existing roadway would result in increased potential hazards to the roadway during both construction and operation of the proposed project. Furthermore, Waterfront Road is the only continuous east-west roadway in the project area between Port Chicago on the east and the City of Martinez on the west. Construction of a railroad crossing over Waterfront Road would require a full road closure, which would result

in increased circulation impacts compared to the proposed project, which would not require road closures.

The western portion of the proposed alignment would be located within the footprint of the previous rail spur that historically served the project site and is adjacent to the storage tanks, pipes, and other infrastructure at the facility that would be used to convey and store products being transported via the reestablished rail spur. Changing just the location of the western portion of the proposed rail spur alignment, west of Waterfront Road, would be infeasible from an engineering standpoint due to the angle of the Martinez Terminal property location from the existing UPRR ROW, as trains are unable to make sharp turns and the area immediately west of the proposed operating tracks consists of marshlands.

The proposed alignment would enter the Martinez Terminal property by reestablishing the rail spur from the westbound direction of UPRR track. As previously discussed, the Martinez Terminal property is surrounded by extant, remnant, and former marshlands, as well as several wildlife areas. The existing UPRR ROW runs east-west just south of the Martinez Terminal property on a strip of land containing the railroad tracks and the Waterfront Road ROW. West of the project site, the areas immediately north and south of the UPRR ROW consist of marshlands and the Waterbird Regional Preserve, respectively. Realigning the proposed spur to enter the property from the eastbound direction of the UPRR track would require constructing a bridge over the existing marshlands into the Martinez Terminal property, which would require considerably increased construction activity and would result in significantly increased impacts to protected wetlands and special-status species when compared to the proposed project. Additionally, the footprint of the historic rail spur extends into the southwestern edge of the Martinez Terminal property in a northwesterly orientation. For the proposed rail spur to enter the Martinez Terminal property from the southwest, the rail spur and operating industry tracks would need to be oriented in a northeasterly direction, which would require a reconfiguration of the infrastructure and layout in the southern portion of the Martinez Terminal, as well as additional construction required to connect pipelines and other ancillary facilities to the operating tracks.

Therefore, due to environmental, geographical, topographical, engineering, and physical constraints at the project site and in the adjacent areas, alternative alignments have been eliminated from further consideration.

5.3.2 Alternate Location - Alternative Site

The overall purpose of the proposed project is to reestablish the rail spur and associated facilities at the project site to restore the Martinez Terminal to the operational functionality historically available and permitted at the site. The project as proposed would rely on existing rail transportation operations on the UPRR ROW and would locate facilities in proximity to existing storage infrastructure at the Martinez Terminal property. The reestablishment of the rail spur and ancillary improvements are proposed specifically to serve the Martinez Terminal. As such, locating the proposed project on an alternative site would not accomplish the overall purpose of the project or the basic project objectives, which are site-specific to the project site. Therefore, this alternative was eliminated from further consideration.

5.3.3 Alternative Engineering/Construction Methods

As discussed in Chapter 2, Project Description, the proposed project would require construction of retaining walls, pier protection, and drainage systems. Several construction methods are available for installation of these improvements and were considered in the design process. Both the proposed pier protection at the Waterfront Road overcrossing and the retaining wall on the

outside, western edge of the operating tracks would involve the installation of several piles drilled into bedrock, while the retaining wall on the inside of the operating tracks would consist of soil nails and a drainage system. As discussed in Section 3.5, Geology and Soils, the western portion of the project site is underlain by Bay Mud, which is a notoriously weak and compressible young alluvial deposit typically comprising silts and clays with high organic content. Additionally, the project site is susceptible to liquefaction and landslides. As such, the construction and design recommendations in the Geotechnical Investigation prepared for the proposed project were developed based on the geologic and soil conditions specific to the project site and the improvements required to provide seismically and geotechnically safe engineering solutions. Therefore, other construction and design methods were not considered for further analysis.

5.4 Alternative Carried Forward for Detailed Analysis

CEQA Guidelines Section 15126.6(f) requires that the range of alternatives presented in an EIR shall be limited to those that would avoid or substantially lessen any of the significant effects of the project. As discussed in the impact analyses in Chapter 3 of this EIR, the potentially significant construction impacts associated with the proposed project are site-specific and have been identified due to the location of the project site. The construction impacts to biological resources are associated with the location of the project site near sensitive biological resources. The construction impacts associated with cultural and tribal cultural resources are associated with the potential for the soils underlying the project site and surrounding area to contain previously unencountered archaeological and tribal cultural resources. The construction impacts associated with hazards and hazardous materials are related to the site's historic use as a storage and hub for petroleum and related products. The only way to avoid or substantially lessen any of the potentially significant construction impacts associated with the proposed project would be to construct the project elsewhere. However, as discussed in the alternate location alternatives considered in Section 5.3.1 and 5.3.2 above, due to numerous constraints at the project site and the nature of the project, development of the proposed project at an alternate location is not considered feasible. As such, no feasible build alternatives have been identified that would achieve the project objectives and/or avoid the potentially significant impacts associated with the proposed project.

One feasible alternative, the "No Project Alternative," has been carried forward for detailed analysis in this EIR as required by CEQA. In accordance with CEQA Guidelines Section 15126.6(d), the alternative has been evaluated in sufficient detail to determine whether the overall environmental impacts of the alternative would be less than, similar to, or greater than the corresponding impacts identified for the proposed project.

5.4.1 No Project Alternative

According to CEQA Guidelines Section 15126.6(e) the No Project Alternative for a development project, such as the proposed project, is the circumstance under which the project does not proceed. Under this alternative, the proposed project would not be implemented in any manner. Under the No Project Alternative, the former rail spur serving the Martinez Terminal property would not be reestablished and products would continue to be delivered to the facility only via wharf and pipeline. As no track construction would occur, the proposed Waterfront Road pier protection, the retaining walls, and the stormwater drainage and containment system would not be installed. Additionally, none of the proposed ancillary improvements, including the conversion of two existing tanks to heated storage; upgrading the existing heating plant with steam generation equipment, and other pump, valve, and piping connections would not be implemented under the No Project Alternative.

Impact Analysis

Air Quality

As discussed in Section 3.1, Air Quality, the proposed project would result in less than significant impacts related to air quality and would not require mitigation. As no construction would occur under the No Project Alternative, no associated air quality emissions would be generated and the construction impact under this alternative would be reduced when compared to the proposed project, although the construction emissions associated with the proposed project would not exceed the established thresholds. However, the No Project Alternative would not benefit from implementation of the proposed new steam generator, which would employ more efficient heating technology than the current heating system and, thus, would generate lower air quality emissions at the facility in the long term. Therefore, long-term operational air quality impacts under the No Project Alternative would be greater than under the proposed project.

Biological Resources

As discussed in Section 3.2, Biological Resources, construction of the proposed project would result in potentially significant impacts to special-status plant and wildlife species, nesting birds, sensitive natural communities, and protected wetlands, and thus, would require the implementation of Mitigation Measures BIO-A through BIO-D to reduce impacts to less than significant. The No Project Alternative would not involve any construction activities or vegetation removal. Therefore, the potentially significant construction impacts would be avoided and impacts to biological resources under the No Project Alternative would be reduced when compared to the proposed project.

As no vegetation removal or ground-disturbing activities would occur during operation of the proposed project, operational impacts to biological resources under the No Project Alternative would be similar to those identified for the proposed project.

Cultural Resources

As discussed in Section 3.3, Cultural Resources, construction of the proposed project would result in potentially significant impacts to archaeological resources, requiring the implementation of Mitigation Measures CUL-A through CUL-C to reduce impacts to less than significant. As no ground-disturbing or construction activities would occur, the potentially significant construction impacts would be avoided under the No Project Alternative. Therefore, impacts to archaeological resources would be reduced under the No Project Alternative when compared to the proposed project.

As no ground-disturbing activities would occur during operation of the proposed project, operational impacts to cultural resources under the No Project Alternative would be similar to those identified for the proposed project.

Energy

As discussed in Section 3.4, Energy, the proposed project would result in less than significant impacts related to energy and would not require mitigation. No construction would occur under the No Project Alternative. As such, no energy would be used nor fuel consumed and the construction impact under this alternative would be reduced when compared to the proposed project. However, under the No Project Alternative, the proposed new steam generator would not be installed. The new steam generator would employ more efficient heating technology than the current heating system and, thus, would result in less energy and fuel demand at the facility.

Therefore, long-term operational energy impacts under the No Project Alternative would be greater than under the proposed project.

Geology and Soils

As discussed in Section 3.5, Geology and Soils, the proposed project would result in less than significant impacts related to geology and soils and would not require mitigation. Project-specific design and construction recommendations are outlined in the Geotechnical Investigation prepared for the project, and in compliance with the CBC and Martinez Municipal Code, to reduce potential adverse effects from strong seismic shaking, liquefaction, landslides, and unstable soils. Additionally, the proposed project would be required to implement an Erosion Control Plan and SWPPP to reduce impacts related to soil erosion and loss of topsoil. Furthermore, although not anticipated, ground-disturbing activities have the potential to encounter previously uncovered paleontological resources. Implementation of the project construction practices and design recommendations of the Geotechnical Investigation and adherence to existing regulations would ensure that construction impacts would be less than significant. As no construction activities would occur under the No Project Alternative, impacts to geology and soils would be reduced under this alternative when compared to the proposed project.

Greenhouse Gas Emissions

As discussed in Section 3.6, Greenhouse Gas Emissions, the proposed project would result in less than significant impacts related to GHG emissions and would not require mitigation. No construction would occur under the No Project Alternative. As such, no associated GHG emissions would be generated and the construction impact under this alternative would be reduces when compared to the proposed project. However, under the No Project Alternative, the proposed new steam generator, which would employ more efficient heating technology than the current heating system and therefore would generate less GHG emissions, would not be installed. Therefore, long-term operational GHG emissions impacts under the No Project Alternative would be greater than under the proposed project.

Hazards and Hazardous Materials

As discussed in Section 3.7, Hazards and Hazardous Materials, construction of the proposed project would result in potentially significant impacts related to the handling and removal of potentially contaminated soils, requiring the implementation of Mitigation Measures HAZ-A through HAZ-C to reduce impacts to less than significant. As no ground-disturbing or construction activities would occur, existing soils would not be disturbed and the potentially significant construction impacts would be avoided under the No Project Alternative. Therefore, impacts to hazards and hazardous materials would be reduced under the No Project Alternative when compared to the proposed project.

As no soil removal activities would occur during operation of the proposed project, operational impacts related to hazards and hazardous materials under the No Project Alternative would be similar to those identified for the proposed project.

Hydrology and Water Quality

As discussed in Section 3.8, Hydrology and Water Quality, the proposed project would result in less than significant impacts related to hydrology and water quality and would not require mitigation. During construction, the proposed project would be required to implement an Erosion Control Plan, SWPPP, and temporary dewatering system, if needed, in accordance with NPDES permitting requirements to reduce impacts related to stormwater runoff, sedimentation, and

erosion. Adherence to existing regulations would ensure that construction impacts to hydrology and water quality would be less than significant. Under the No Project Alternative, no ground-disturbing or construction activities would occur that could affect hydrology or water quality. Therefore, construction impacts under the No Project Alternative would be reduced when compared to the proposed project.

The proposed project also includes installation of a stormwater drainage and containment system to collect and contain drainage and runoff from the project site during operation of the reestablished rail spur. The stormwater drainage and containment system would ensure that flows from the project site would not degrade water quality, exceed stormwater drainage capacity, or result in erosion, siltation, flooding during operation of the proposed project. Under the No Project Alternative, no new stormwater drainage and containment system would be installed at the project site. The proposed new system is designed specifically for operation of the rail spur. As rail service would not be reestablished to the project site under this alternative, drainage flows would not change, runoff would continue to be collected and conveyed via the existing stormwater drainage system, and the new system would not be needed. Therefore, impacts to hydrology and water quality would be reduced under the No Project Alternative when compared to the proposed project.

Noise

As discussed in Section 3.9, Noise, the proposed project would result in less than significant impacts related to noise and vibration and would not require mitigation. Construction activities associated with the proposed project would not exceed noise or vibration thresholds at the nearest sensitive receptors. Nonetheless, as no construction activities would occur under the No Project Alternative, construction impacts would be reduced when compared to the proposed project.

As discussed in Section 3.9, operation of the proposed project would not add new train trips on the existing UPRR tracks or substantial new stationary noise sources, and would not increase operational noise levels compared to existing conditions. Additionally, the proposed project would not involve equipment, facilities, or activities that would result in perceptible groundborne vibration compared to the existing conditions. As such, operational noise impacts under the No Project Alternative would be similar to the proposed project.

Transportation

As discussed in Section 3.10, Transportation, the proposed project would result in less than significant impacts related to transportation and would not require mitigation. As the proposed project involves modifications to the existing Waterfront Road overcrossing, CPUC review and adherence to existing permitting requirements would be required to ensure that construction impacts to transit facilities would be less than significant. Additionally, the proposed project would implement a TCP during construction to ensure that construction impacts to roadway, pedestrian, and bicycle facilities, and hazards due to geometric design features would be less than significant. Under the No Project Alternative, no construction activities would occur and the proposed pier protections at the existing Waterfront Road overcrossing would not be required. Therefore, construction impacts under the No Project Alternative would be reduced when compared to the proposed project.

As shown in Section 3.10, operation of the proposed project would be consistent with the applicable programs, plans, ordinances, and policies addressing the circulation system and would not increase hazards due to geometric design features. Additionally, the proposed project meets the County's VMT screening criterion for a "small project" based on the calculated trip generation

and is, therefore, presumed to have a less than significant impact related to VMT. Nonetheless, as no new trips would be generated under the No Project Alternative, operational transportation impacts under this alternative would be reduced when compared to the proposed project.

Tribal Cultural Resources

As discussed in Section 3.11, Tribal Cultural Resources, construction of the proposed project would result in potentially significant impacts to tribal cultural resources, requiring the implementation of Mitigation Measures TCR-A through TCR-D to reduce impacts to less than significant. As no ground-disturbing or construction activities would occur under the No Project Alternative, the potentially significant construction impacts would be avoided. Therefore, impacts to tribal cultural resources would be reduced under the No Project Alternative when compared to the proposed project.

As no ground-disturbing activities would occur during operation of the proposed project, operational impacts to tribal cultural resources under the No Project Alternative would be similar to those identified for the proposed project.

Relationship to Project Objectives

No development would occur under the No Project Alternative and the rail spur and associated rail service to the Martinez Terminal would not be reestablished. Additionally, none of the proposed ancillary improvements would be implemented at the project site. Therefore, the No Project Alternative would not achieve any of the project objectives.

Conclusion

As discussed above, under the No Project Alternative the former rail spur serving the Martinez Terminal property would not be reestablished and products would continue to be delivered to the facility only via wharf and pipeline. Additionally, none of the proposed ancillary improvements would be implemented. As no development would occur under this alternative, it would result in reduced impacts when compared to the proposed project in the following areas: air quality (construction); energy (construction); geology and soils; GHG emissions (construction); hydrology and water quality; noise (construction); and transportation. Additionally, the No Project Alternative would avoid the potentially significant construction impacts identified for the proposed project in the following areas: biological resources; cultural resources; hazards and hazardous materials; and tribal cultural resources. However, the proposed new steam generator would not be installed under the No Project Alternative. As the new steam generator would use more efficient heating technology than the current heating system, long-term operation impacts under the No Project Alternative would be increased in the following areas when compared to the proposed project: air quality; energy; and GHG emissions. As no ground-disturbing activities would occur under the No Project Alternative, operational impacts in the following areas would be similar to those identified for the proposed project: biological resources; cultural resources; and tribal cultural resources. Additionally, operational noise impacts under the No Project Alternative would be similar to the proposed project, as the proposed project would not increase operational noise or vibration levels compared to existing conditions.

5.5 Environmentally Superior Alternative

In accordance with CEQA Guidelines Section 15126.6, an EIR shall identify an environmentally superior alternative among the feasible alternatives. The analysis in this chapter is summarized in Table 5-1, which provides a comparison of the impacts of the project alternatives. The No Project Alternative would avoid the potentially significant impacts to biological resources, cultural

resources, hazards and hazardous materials, and tribal cultural resources associated with ground-disturbing and construction activities. However, the proposed new steam generator, which would use more efficient heating technology than the current heating system, would not be installed under the No Project Alternative. As such, the No Project Alternative would result in greater long-term operational impacts related to air quality, energy, and greenhouse gas emissions. Nonetheless, the No Project Alternative would be environmentally superior alternative because it would avoid the potentially significant impacts identified for the proposed project and would result in reduced impacts in eight environmental issue areas. Pursuant to Section 15126.6(e)(2) of the CEQA Guidelines, if the environmentally superior alternative is the No Project Alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. As discussed in Section 5.4 above, due the nature of the project, no feasible build alternatives were identified. Although the No Project Alternative would avoid the potentially significant construction impacts associated with development of the proposed project, these impacts would be short-term in nature and would be reduced to less than significant levels with implementation of the identified mitigation measures. Additionally, the No Project Alternative would not support the overall purpose of the project or achieve any of the project objectives. Therefore, the proposed project would be considered the environmentally superior alternative.

Table 5-1: Comparison of Impacts of the Project Alternatives

Impact Area	Proposed Project	No Project Alternative
Air Quality		
Construction	II	Less
Operation	II	Greater
Biological Resources		
Construction	I	Less
Operation	III	Similar
Cultural Resources		
Construction	I	Less
Operation	III	Similar
Energy		
Construction	II	Less
Operation	II	Greater
Geology and Soils		
Construction	II	Less
Operation	II	Less
Greenhouse Gas Emissions		
Construction	II	Less
Operation	II	Greater
Hazards and Hazardous Materials		
Construction	I	Less
Operation	II	Less
Hydrology and Water Quality		
Construction	II	Less
Operation	II	Less
Noise		
Construction	II	Less
Operation	II	Similar
Transportation		
Construction	II	Less
Operation	II	Less
Tribal Cultural Resources		
Construction	I	Less
Operation	III	Similar

Notes:

I. Potentially Significant Impact Unless Mitigated
II. Less than Significant Impact
III. No Impact

Less: Impact is lower in magnitude than impacts of the proposed project.
Similar: Impact is similar in magnitude to impacts of the proposed project.
Greater: Impact is greater in magnitude than impacts of the proposed project.

CHAPTER 6
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CHAPTER 7
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5 Alternatives

No references were used.

6 List of Preparers and Persons Consulted

No references were used.