Draft Environmental Impact Report

Tidelands Avenue Electric Truck Hub Project

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
AQIA	Air Quality Impact Analysis
ATCM	Airborne Toxic Control Measure
BESS	battery energy storage system
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERP	Community Emissions Reduction Plan
CFR	Code of Federal Regulations
CO_2	carbon dioxide
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dBA	decibel
dBA	A-weighted decibel
DEHQ	County of San Diego Department of Environmental Health and Quality
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	environmental impact report
EISA	Energy Independence and Security Act
EO	Executive Order
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ERP	Emergency Response Plan
ESA	Environmental Site Assessment
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FICON	Federal Interagency Committee on Noise
GHG	greenhouse gas
HMA	Hazard Mitigation Analysis
HMBP	Hazardous Material Business Plan

Acronym/Abbreviation	Definition
HMD	San Diego County Department of Environmental Health Hazardous Materials Division
HU	hydrologic unit
HVAC	heating, ventilation, and air conditioning
I	Interstate
JRMP	Jurisdictional Runoff Management Plan
kWh	kilowatt-hour
LFP	lithium iron phosphate
LT	long-term
MCAS	Maritime Clean Air Strategy
MS4	municipal separate storm sewer systems
MT	metric ton
NAAQS	National Ambient Air Quality Standards
NOP	Notice of Preparation
NO_x	oxides of nitrogen
OSHA	Occupational Safety and Health Administration
NPDES	National Pollutant Discharge Elimination System
PCB	polychlorinated biphenyl
PDF	project design feature
PDP	priority development project
$PM_{2.5}$	fine particulate matter
PM_{10}	coarse particulate matter
PRC	California Public Resources Code
PV	photovoltaic
RAQS	Regional Air Quality Strategy
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RFI	Request for Information
RFP	Request for Proposals
RFS	Renewable Fuel Standard
RTIP	Regional Transportation Improvement Program
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SB	Senate Bill
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SDG&E	San Diego Gas and Electric Company
SIP	State Implementation Plan
SPCC	spill prevention control and countermeasure
SLT	screening level threshold
ST	short-term
SWPPP	stormwater pollution prevention plan
SWQMP	stormwater quality management plan
SWRCB	State Water Resources Control Board

Acronym/Abbreviation	Definition
TAC	toxic air contaminant
USC	U.S. Code
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
WQIP	Watershed Quality Improvement Plan
ZEV	zero-emissions vehicle

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ES Executive Summary

ES.1 Introduction

This chapter provides a summary of the Draft Environmental Impact Report (EIR) prepared for the Tidelands Avenue Electric Truck Hub Project (proposed project or project) in compliance with the California Environmental Quality Act (CEQA). The San Diego Unified Port District (District) is the CEQA lead agency for the EIR and, as such, has the primary responsibility for evaluating the environmental effects of the proposed project and considering whether to approve the proposed project in light of these effects.

As required by CEQA, this Draft EIR: (1) describes the proposed project, including its location, objectives, and features; (2) describes the existing conditions at the project site and nearby environs; (3) analyzes the direct, indirect, and cumulative adverse physical effects that would occur on existing conditions should the proposed project be implemented; (4) identifies feasible means of avoiding or substantially lessening the significant adverse effects of the proposed project; (5) provides a determination of significance for each impact after mitigation is incorporated; and (6) evaluates a reasonable range of feasible alternatives to the proposed project that would meet the basic project objectives and reduce a project-related significant impact. In compliance with CEQA, the EIR evaluated potential impacts and mitigation measures; however, the analysis concluded that no significant impacts would occur, and no mitigation is required.

This Executive Summary covers the following topics: (1) project description; (2) areas of known controversy/issues raised by agencies and the public; (3) issues to be resolved, including significant environmental effects and the consideration of alternatives to the proposed project; (4) a summary of project alternatives; and (5) the environmentally superior alternative. This Draft EIR and its appendices are available for review on the District's website at https://www.portofsandiego.org/public-records/port-updates/notices-disclosures/ceqa-documents. In addition, a hardcopy is available for review by the public during District business hours at the Port Administration Building located at 3165 Pacific Highway, San Diego, California 92101, at the National City Public Library located at 1401 National City Boulevard, National City, California 91950, and at the Logan Heights Library at 567 S 28th St., San Diego, California 92113.

ES.2 Project Description

ES.2.1 Overview

Skychargers LLC (Applicant) is the project proponent having been selected by the Port board following a transparent public process that included considerations for location, size and components of the proposal. The project consists of the following components: (1) zero-emissions vehicle (ZEV) truck charging and parking stalls, (2) a photovoltaic (PV) canopy, (3) a battery energy storage system (BESS), (4) a convenience store, and (5) infrastructure improvements. The proposed project is intended to serve electric trucks that frequently visit and serve the nearby marine terminals and other related storage facilities in the vicinity.

The proposed project would have a total of 70 charging stalls. All 70 charging stalls would be available to charge trucks simultaneously. Up to 30 trucks are anticipated to use the site during the initial operating year as part of the Trucking as a Service (TaaS) program, a service where a standard monthly fee is charged and in return the truck

operator gets a fully charged and maintained truck to go to work. The program may also include an option for truck operators to own the ZEV truck at the end of the lease. Gradually, an additional 16 trucks may be added to the program over the next 3 to 5 years. Additionally, ZEV truck charging infrastructure would be available on site to support municipal fleets, local businesses with truck fleets, and passenger vehicles, dependent on available capacity, with priority for ZEV trucks serving the District. As part of the TaaS program, participating operators may have assigned, dedicated parking/charge stalls, and participating trucks serving one of the two marine cargo terminals would have priority over all other vehicles for the charging stalls. The site would be equipped with gates that may be used for access control as needed to enforce the priority of use.

ES.2.2 Project Location and Existing Setting

The project site includes approximately 4.8 acres of lease area within approximately an 8.2-acre parcel, which is an existing paved site and located at 1640 Tidelands Avenue (Assessor's Parcel Number 760-044-51-00) in the City of National City in San Diego County, California. National City is approximately 5 miles south of downtown San Diego, along San Diego Bay, and approximately 10 miles north of the U.S.–Mexico border. National City is bordered by the City of San Diego to the north and east, the City of Chula Vista to the south, the unincorporated areas of Lincoln Acres and Bonita to the south and southeast, and San Diego Bay to the west.

The project site is immediately south of the District's Port Operations Center building (formerly known as the Port's General Services building), located at 1400 Tidelands Avenue in National City. The site is bounded on the east by Tidelands Avenue, on the south by West 19th Street, and on the west by U.S. Naval Base San Diego. Gate 13, one of the U.S. Naval Base access gates, is at the west end of West 19th Street.

The site falls within the National City Bayfront: Planning District 5 of the Port Master Plan, subarea Northern Industrial, and is zoned for Industrial, Maritime Related. Permitted uses include manufacturing, storage, transportation facilities such as the project, and distribution. The project is subject to a non-appealable Coastal Development Permit from the District.

The project site is currently developed with parking as an overflow roll-on/roll-off yard and a chassis storage facility (parking) for Pasha Automotive Services. There are no structures on the site. The site is primarily paved with asphalt, with some landscape trees along the eastern border of the site, and is fenced around its entire perimeter.

There are two designated truck routes: one truck route runs along Harbor Drive, then connects to adjacent freeways I-5 and I-15 via 28th or 32nd Streets in the City of San Diego or 8th Street in the City of National City, and the other truck route runs along Tidelands Avenue between 24th Street and Civic Center. The truck route along Harbor Drive is a right-of-way (ROW) controlled by the City of San Diego and the truck route along Tidelands Avenue is a ROW controlled by the City of National City. Enforcement of the Truck Routes is within the purview of the City of San Diego and National City, respectively, as they are located within ROW the District does not have direct enforcement authority for.

ES.2.3 Project Objectives

The objectives of the proposed project are as follows:

1. Contribute to achieving the District's goal of electrifying the District's maritime operations, specifically the movement of goods via heavy-duty trucks.

2. Facilitate compliance with the District's long-term emissions goals for maritime operations.
3. Reduce criteria pollution emissions and improve air quality and health benefits in the Portside Community and greater San Diego Air Basin.
4. Design a truck charging hub utilizing industry best practices for safety, including first-move-forward and pull-through parking areas.
5. Provide health equity through decarbonization and lowering pollution in historically poor air quality zones and communities.
6. Support the Maritime Clean Air Strategy (MCAS) long-term goal to achieve 100% ZEV heavy-duty truck trips by 2030 to the marine cargo terminals and advance MCAS Truck Goal 2, which focuses on facilitating the deployment of infrastructure to support the transition to ZEV trucks.
7. Provide a size and scale that achieves a development cost efficiency and an affordable, sustainable energy source for operators.
8. Generate and store zero carbon electricity on site to supplement utility power and lower the carbon intensity of energy provided on site.
9. Prioritize access to charging infrastructure for ZEV truck operators visiting one of the District's marine cargo terminals and maximize charging utilization.
10. Provide small-fleet and independent ZEV truck operators with a safe, fast, and reliable charging facility in close proximity to the marine cargo terminals.
11. Support the District's consistency with the California Sustainable Freight Action Plan.
12. Utilize awarded grant funding and meet contractual obligations to construct 70 ZEV truck charging stalls in an expeditious manner.

ES.3 Areas of Known Controversy/Issues Raised by Agencies and the Public

Pursuant to CEQA Section 15123(b)(2), an EIR shall identify areas of controversy known to the lead agency, including issues raised by the agencies, and the public, and issues to be resolved. The District circulated a Notice of Preparation (NOP) to solicit agency and public comments on the scope and content of the EIR. The NOP was made available for a minimum 30-day public review period that started on Wednesday June 18, 2025, and ended on Monday July 21, 2025. Two public scoping meetings were held to solicit comments on the scope of the proposed EIR. The first meeting was held in person at 6:00 p.m. on Tuesday, June 24, 2025, in the community room at the National City Public Library. The second meeting was a virtual public scoping meeting held at 6:00 p.m. on Wednesday, June 25, 2025.

A total of eight comment letters were received during the NOP public review period. The issues raised by agencies and the public were in regard to air quality, energy, hazards and hazardous materials, noise, transportation, tribal cultural resources, and alternatives. A summary of all the comments received is included in Table 1-2 of Chapter 1, Introduction, and all NOP comment letters are included in Appendix B of this EIR.

ES.3.1 Summary of Inter-related Environmental Issues Raised

Several of the environmental issues raised were safety concerns of fire risk and associated smoke/burning emissions. These are inter-related to multiple topics within the structure of this document (and CEQA more broadly).

In an effort to help the public find those issues in this EIR and understand how they have been addressed, this section summarizes these inter-related issues and guides the reader to sections of this EIR where they can find detailed analysis.

Issues related to air quality emissions that could be released in the event of a fire at the facility are discussed in Section 3.1, Air Quality. The analysis addresses emissions from a fire within the lithium-ion technology batteries that could be caused by the phenomenon of thermal runaway, whereby the system essentially overheats to a point at which it ignites. During normal operations, there would be no toxic air emissions from the project. The BESS would be equipped with (1) monitoring and control systems, (2) fire detection and protection systems, and (3) gas ventilation systems, among others, to prevent, monitor, and/or control any battery cell malfunctions. A dispersion modeling analysis was conducted to assess the health risk impacts of emissions during a fire caused by a thermal runaway event and where such emissions would travel based on prevailing wind patterns. Impacts related to air quality were found to be less than significant. For more details, refer to Section 3.1.4.3 of this EIR.

Issues related to hazardous and hazardous materials, including hazards from a thermal runaway event and electric truck fire event, are discussed in Section 3.3, Hazards and Hazardous Materials. The proposed BESS facility would use lithium-ion batteries, which contain flammable and corrosive liquid materials. As discussed in Section 3.1, Air Quality, it is possible that a thermal runaway event could result in a fire and subsequent burning would release emissions. The proposed project BESS system is designed to contain such fires within a single battery module. Batteries would be housed in an enclosure and contained according to specifications that follow applicable federal, state, and local requirements, including appropriate ventilation, acid resistant materials, and presence of spill response supplies. The BESS enclosure would also be equipped with heating, ventilation, and air conditioning systems for thermal management of the batteries. Enclosures used to store hazardous materials would also be inspected regularly for any signs of failure or leakage. Due to the engineered safety features of the BESS, the results of the hazardous consequence analysis, and the implementation of a site-specific Hazard Mitigation Analysis (Appendix D4) and Emergency Response Plan (Appendix D5), the potential for upset or accident conditions involving hazardous materials during project operation would be effectively minimized. For more details, refer to Section 3.3.4.3 of this EIR.

Issues related to the project's alternatives, including an alternative location or battery technology alterative, are discussed in Chapter 6, Alternatives. As summarized below in Section ES.4, the alternatives analyzed in detail in Chapter 6 include the No Project Alternative, the No Interim Generator Alternative, and the Alternate Location Alternative.

In response to public scoping comments expressing concern about lithium battery fire hazards, the BESS Technology Alternative considers the use of different battery technologies such as iron flow or zinc–based batteries. These technologies, offered by domestic manufacturers such as ESS Tech (Iron Flow) and EOS Energy Enterprises (Zinc), are considered to have enhanced thermal stability and reduced flammability compared to conventional lithium-based systems. However, there is not a successful track record of installation and operation for these technologies, they cost more to construct and maintain and would require additional space. Additionally, the No Interim Generator Alternative would eliminate short-term emissions associated with the interim diesel generator use, which would reduce the severity of impacts related to air quality, energy, hazards and hazardous materials, and noise. For more details, refer to Chapter 6 of this EIR.

ES.4 Issues to Be Resolved

Summary of Project Impacts

This Draft EIR examines the potential environmental effects of the proposed project, including information related to existing site conditions, analyses of the types and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts. In accordance with Appendix G of the State CEQA Guidelines, the potential environmental effects of the proposed project were analyzed for the following areas.

- Air quality
- Energy
- Hazardous and hazardous materials
- Hydrology and water quality
- Noise
- Transportation

Table ES-1, presented at the end of this executive summary, provides a summary of the environmental impacts that could result from implementation of the proposed project and feasible mitigation measures that would reduce or avoid the impacts. For each impact, Table ES-1 identifies the significance of the impact before mitigation, applicable mitigation measures, and the level of significance of the impact after the implementation of the mitigation measures. As shown in Table ES-1, the EIR determined that all impacts would be less than significant, and no mitigation is required.

Pursuant to CEQA Guidelines Section 15063, the District prepared an Initial Study that determined that effects related to aesthetics, agricultural and forestry resources, biological resources, cultural resources, geology and soils, greenhouse gas emissions, land use and planning, mineral resources, noise, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire would not be significant. Impacts related to noise were also determined to be less than significant in the Initial Study; however, in response to public scoping comments, issues related to noise are addressed in Chapter 3, Environmental Analysis, of this EIR. Two California Native American tribes responded to the District's consultation request and both requested tribal monitoring during ground-disturbing activities. As result of consultation, although the site is previously developed and paved, and excavation limited, the District has incorporated Project Condition (PC) TCR-1, which requires tribal monitoring during excavation that penetrates the existing pavement. Refer to Section 2.8.3 for the full PC description. This measure ensures that any potential tribal cultural resources encountered during construction will be appropriately identified and protected. In addition, the District determined through the Initial Study that the project would have a less-than-significant impact or no impact on certain thresholds for air quality, energy, hazards and hazardous materials, hydrology and water quality, and transportation. In accordance with CEQA Guidelines Section 15128, a brief explanation indicating the reasons why the effects on these resources would not be significant is provided in Chapter 5, Additional Consequences of Project Implementation. The Notice of Preparation/Initial Study Environmental Checklist is included as Appendix A of this EIR.

ES.5 Summary of Project Alternatives

The following alternatives are analyzed in detail in Chapter 6, Alternatives to the Proposed Project. The primary purpose of the alternatives analysis is to consider and analyze a reasonable range of feasible alternatives in sufficient detail to foster informed decision making and public participation in the environmental review process. The alternatives to the proposed project are summarized below.

ES.5.1 Alternative 1 – No Project

The No Project Alternative is required by CEQA to discuss and analyze potential impacts that would occur if the proposed project were not implemented. Under the No Project Alternative, the project site would continue to be used as an overflow roll-on/roll-off yard and a chassis storage facility (parking) for Pasha Automotive Services. None of the proposed project components would be constructed or implemented.

Under the No Project Alternative, the proposed development of ZEV truck charging infrastructure, including a PV canopy, BESS, and driver amenities, would not be implemented. As a result, no new charging facilities would be constructed at or near the marine terminals and associated facilities, and no operational accommodations such as ZEV truck leasing or priority charging would be provided.

ES.5.2 Alternative 2 – No Interim Generator

Under this alternative, the project would forgo the use of an interim diesel generator during the initial operational phase and instead would rely solely on the PV arrays, BESS, and utility grid connection from the outset. While this approach may result in limited charging capacity during early operations, particularly before full grid interconnection and PV/BESS optimization, it would eliminate short-term emissions associated with generator use. Although emissions from the interim generator under the proposed project are not considered significant, this alternative would better align with the project's sustainability objectives and the District's MCAS by avoiding combustion-based energy sources entirely.

ES.5.3 Alternative 3 – Alternate Location

Under this alternative, the proposed project would be located on the southwest corner of the 19th St./Tidelands Ave. intersection, instead of the northwest corner of this intersection where the project is currently proposed. The current location was identified following a years-long, transparent process that started with the District issuing a Request for Information (RFI) on May 23, 2022 (Appendix H), seeking input on issues including, but not limited to, development interest, business models, siting preferences, and cost and timelines for the development of public-facing infrastructure for ZEV trucks. The RFI included four sites located on Tidelands Avenue and four regional locations throughout San Diego County along routes frequented by trucks traveling to and from the District's marine cargo terminals. This RFI also welcomed suggestions for developing sites not identified in the solicitation.

The on-Tidelands parcels initially considered for the project included:

- Tenth Avenue Marine Terminal Dirt Lot (San Diego)
- Pepper Oil (National City)
- 19th Street and Tidelands Avenue, Northwest (National City)
- 19th Street and Tidelands Avenue, Southwest (National City)

The solicitation process, which ultimately led to the proposed project at the northwest corner of the 19th Street and Tidelands Avenue intersection, also included several public BPC meetings, stakeholder meetings, and a Request for Proposals issued on April 24, 2023. This process revealed limited opportunities for industrial projects on District Tidelands given the limited area designated for industrial land uses and limited parcels that are available and not under long-term real estate agreements. The proposed project location and the location analyzed in this Alternate Location Alternative analysis at the southwest corner of the 19th Street and Tidelands Avenue intersection were the two locations that advanced the furthest in the solicitation process and met most or all the site suitability criteria.

Given no significant impacts have been identified from the proposed project, and the Alternate Location Alternative is located near the proposed project location in National City and would not lessen the magnitude of any impacts identified for the proposed project, the Alternate Location Alternative does not offer advantages over, nor mitigate impacts from, the proposed project.

ES.6 Environmentally Superior Alternative

CEQA Guidelines, Section 15126.6(e)(2), requires the identification of an environmentally superior alternative among the alternatives analyzed in an EIR. The guidelines also require that if the No Project Alternative is identified as the environmentally superior alternative, then another environmentally superior alternative must be identified among the other alternatives.

As discussed in Section 6.5.4, Environmentally Superior Alternative, the No Interim Generator Alternative (Alternative 2) is considered the environmentally superior alternative, and the overall impacts on environmental resources would be reduced compared to those of the proposed project. Alternative 2 would eliminate the temporary use of a diesel generator during the initial operational phase, which would reduce impacts related to air quality, energy, hazards and hazardous materials, and noise. Alternative 2 would meet the project objectives (see Table 6-3, Summary Impact Comparison of Proposed Project and Alternatives) and would result in a slight improvement in achieving objectives related to reducing emissions and generating zero-carbon electricity (Objectives No. 1, 3, 5, 8, and 11) by avoiding the use of a combustion-based energy source during early operations. The possible exception to meeting project objectives would be Project Objective 12, which is dependent on the capability of the grid at the time of project opening as to whether sufficient energy for 70 stalls could be delivered.

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measures	Level of Significance After Mitigation
Air Quality			
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	Less than significant	None required.	Less than significant
Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than significant	None required.	Less than significant
Would the project have a cumulative effect on air quality resources?	Less than significant	None required.	Less than significant
Energy			
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	None required.	Less than significant
Would the project have a cumulative effect on energy resources?	Less than significant	None required.	Less than significant
Hazards and Hazardous Materials			
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	None required.	Less than significant
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?	Less than significant	None required.	Less than significant
Would the project be located on a site that 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?	Less than significant	None required.	Less than significant
Would the project have a cumulative effect on hazards or hazardous materials?	Less than significant	None required.	Less than significant

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measures	Level of Significance After Mitigation
Hydrology and Water Quality			
Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than significant	None required.	Less than significant
Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than significant	None required.	Less than significant
Would the project have a cumulative effect on hydrology or water quality resources?	Less than significant	None required.	Less than significant
Noise			
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	None required.	Less than significant
Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than significant	None required.	Less than significant
Would the project have a cumulative effect on noise?	Less than significant	None required.	Less than significant
Transportation			
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	None required.	Less than significant
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	None required.	Less than significant
Would the project result in inadequate emergency access?	Less than significant	None required.	Less than significant
Would the project result in an insufficient parking supply that would lead to a decrease in public coastal access?	Less than significant	None required.	Less than significant
Would the project have a cumulative effect on transportation resources?	Less than significant	None required.	Less than significant

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1 Introduction

1.1 Project Overview

Skychargers LLC (Applicant) is proposing to lease approximately 4.8 acres of an approximately 8.2-acre parcel from the San Diego Unified Port District (District) to develop the proposed Tidelands Avenue Electric Truck Hub Project (project). The project consists of the following components: (1) zero-emissions vehicle (ZEV) truck charging and parking stalls, (2) photovoltaic (PV) canopy, (3) battery energy storage system, (4) convenience store, and (5) infrastructure improvements. The project is intended to serve electric trucks that frequently visit and serve the nearby marine terminals and other related storage facilities in the vicinity.

The project would have a total of 70 charging stalls, with up to 30 trucks anticipated to use the site during the initial operating year as part of the Trucking as a Service (TaaS) program, a service where a standard monthly fee is charged and in return the truck operator gets a fully charged and maintained truck to use. An additional 16 trucks may be added to the program over the next 3 to 5 years. Additionally, ZEV truck charging infrastructure would be available on site to support municipal fleets, local businesses with truck fleets, and passenger vehicles, dependent on available capacity. TaaS program participating operators may have assigned, dedicated parking stalls/charge ports, and trucks serving one of the two marine cargo terminals would have priority over all other vehicles for the opportunity charging stalls. The site would be equipped with gates that may be used for access control as needed to enforce the priority of use.

In addition to the project overview provided above, this chapter briefly discusses (1) the purpose of the California Environmental Quality Act (CEQA) and this Draft Environmental Impact Report (EIR), (2) the intended uses for this Draft EIR, (3) the scope and content of this Draft EIR, and (4) the organization of this Draft EIR.

1.2 Purpose of the California Environmental Quality Act and the Environmental Impact Report

This Draft EIR, which evaluates the environmental effects of the proposed project, has been prepared in compliance with CEQA (Public Resources Code Section 21000 et seq.) and the state CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.). This Draft EIR has also been prepared in compliance with the District's Guidelines for Compliance with CEQA (Resolution 97-191). CEQA was enacted by the California legislature in 1970. As noted under state CEQA Guidelines Section 15002, CEQA has four basic purposes:

1. Inform governmental decision-makers and the public about the potential significant environmental effects of proposed activities.
2. Identify the ways in which environmental damage can be avoided or significantly reduced.
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An EIR is an informational document, the purpose of which is to inform members of the public and agency decision-makers of the significant environmental effects of a proposed project, identify feasible ways to reduce the significant effects of the proposed project, and describe a reasonable range of feasible alternatives to the project that would reduce one or more significant effects and still meet the proposed project's objectives. In instances where significant impacts cannot be avoided or mitigated, the proposed project may nonetheless be carried out or approved if the approving agency finds that economic, legal, social, technological, or other benefits outweigh the unavoidable significant environmental impacts.

1.3 Background

The Maritime Clean Air Strategy (MCAS) is the District's strategy to transition from diesel-powered vehicles and equipment towards zero-emission technologies. The MCAS also contains strategies to improve operational efficiency that can further reduce harmful emissions, especially in those cases where zero-emission technologies are not yet available or feasible for operations, such as with ocean going vessels. The MCAS has goals and objectives to reduce emissions from seven maritime sources, focusing on the marine cargo terminals and moving imported goods in and around the San Diego region and the western United States. The strategy also contains stakeholder priorities to keep the community informed that can in turn, support clean air efforts and the transition away from diesel powered vehicles and equipment. There are approximately 40 separate initiatives that are tracked, and approximately 80% have been implemented as of September 2025.

Heavy-duty trucks are one of seven sources of diesel emissions the District is trying to reduce and eventually eliminate. The District's MCAS has a long-term goal to have all (100%) truck trips to marine cargo terminals be zero emission by 2030. If approved, this project would help efforts to achieve this goal. There are three basic types of challenges that the District has faced over the last several years in trying to transition from diesel trucks to ZEV trucks:

1. Matching the technology to the required work, or duty cycle (current technology cannot send a truck 500 miles)
2. Cost of new electric trucks (incentives and grants can help but do not cover the whole cost and may have additional costs themselves [administrative, filing and applying, etc.])
3. Lack of existing charging infrastructure

The project's proximity to marine terminals, location along the existing truck route, and priority for trucks that frequently visit and serve the nearby marine terminals is intended to promote alignment with the duty cycle and address challenge No. 1. The proposed project includes a program called TaaS as a way of addressing challenge No. 2. This is a service where a standard monthly fee is charged and in return the truck operator gets a fully charged and maintained truck to use. The program may also include the option for truck operators to own the ZEV truck at the end of the lease. Trucks that are part of the TaaS program may be charged overnight in the overnight charging stalls. Other, fast charging stalls would be available for "opportunity charging" to quickly provide additional charge when needed. The project would provide charging infrastructure, directly contributing to addressing challenge No. 3.

1.4 Intended Uses of the Environmental Impact Report

According to Section 21002.1(a) of CEQA, "[t]he purpose of an environmental impact report is to identify the significant effects of a project, to identify alternatives to the project, and to indicate the manner in which those

significant effects can be mitigated or avoided." This EIR provides relevant information concerning the potential environmental effects associated with construction and operation of the proposed project and identifies and evaluates potentially significant effects that may result from implementation of the proposed project. It is intended for use by decision-makers and the public.

This section discusses the intended uses for this Draft EIR and includes (1) a list of agencies that would be expected to use this Draft EIR for decision-making and (2) a list of required permits and other approvals that would be required to implement the proposed project. Environmental review and consultation requirements under federal, state, or local laws, regulations, or policies that are in addition to CEQA are discussed in the applicable individual resource sections in Chapter 3, Environmental Analysis.

1.4.1 Agencies Expected to Use this Environmental Impact Report

The District is the CEQA lead agency, as defined under state CEQA Guidelines Sections 15050 and 15051, because it has principal responsibility for approving the proposed project. As the lead agency, the District also has primary responsibility for complying with CEQA. As such, the District has analyzed the environmental effects of the proposed project; the results of that analysis are presented in this Draft EIR. The Board of Port Commissioners (Board), in its role as the decision-making body of the District, is responsible for certifying the Final EIR and approving the Findings of Fact, and Statement of Overriding Considerations, if required, pursuant to Sections 15090–15093 of the state CEQA Guidelines, prior to project approval. The Board is also responsible for authorization of issuance of a Coastal Development Permit. Finally, the Board would also be responsible for entering into a lease with the Applicant to occupy District Tidelands, develop and operate the project.

The State Water Resources Control Board would rely on the EIR to evaluate the project's eligibility for coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit), which regulates stormwater runoff from construction sites. The California Department of Transportation (Caltrans) is also considered a responsible agency because approval from Caltrans would be required for overweight/oversized loads on highways. The Federal Emergency Management Agency, Region 9, would review the project for compliance with the National Flood Insurance Program's building code standards.

As a responsible agency under CEQA, National City would be responsible for permitting activities of the proposed project within its permitting authority.

Table 1-1 provides a summary list of the approvals and permits that would be required.

Table 1-1. List of Required Discretionary Actions

Actions	Agency
Federal Agencies	
National flood building code	Federal Emergency Management Agency, Region 9
State Agencies	
NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit)	State Water Resources Control Board

Table 1-1. List of Required Discretionary Actions

Actions	Agency
Overweight/oversized loads on highways	California Department of Transportation
Local Agencies	
Certification of the EIR	District
Adoption of the Mitigation Monitoring and Reporting Program	District
Adoption of the Findings of Fact	District
Adoption of the Statement of Overriding Considerations, if applicable	District
Approval of the proposed project	District
Approval of a non-appealable Coastal Development Permit	District
Approval of a lease and other necessary real estate agreements	District
Approval of stormwater quality management plan (post-construction best management practices)	District
Approval of off-site utility, access, and maintenance easements	National City
Issuance of ministerial permits (including building and grading permits)	National City
Authority to Construct/Permit to Operate	San Diego County Air Pollution Control District

Note: District = San Diego Unified Port District.

1.5 Scope and Content of the Draft Environmental Impact Report

As the CEQA lead agency, the District is responsible for determining the scope and content of this Draft EIR, a process referred to as scoping. As part of the scoping process, the District considered the environmental resources present on site and in the surrounding area and identified the probable environmental effects of the proposed project. On June 18, 2025, the District posted a Notice of Preparation (NOP) with the San Diego County Clerk in accordance with Section 15082 of the state CEQA Guidelines. The public review period for the NOP began on June 18, 2025, and ended on July 21, 2025. The NOP and notices of the NOP availability were mailed to public agencies, organizations, and other interested individuals to solicit their comments on the scope and content of the environmental analysis. The District held two public scoping meetings to solicit comments on the scope of the proposed EIR. The first meeting was held in-person on Tuesday, June 24, 2025, in the community room at the National City Public Library at 1401 National City Boulevard, National City, California 91950. The second meeting was a virtual public scoping meeting held on Wednesday, June 25, 2025. Translation services were available at both meetings for Spanish and Tagalog speakers. Comments received in response to the NOP were used to determine the scope of this Draft EIR. The comments are summarized in Table 1-2 below. Based on the District's preliminary evaluation of the probable effects of the proposed project and a thorough review of the comments on the NOP, the Draft EIR analyzes effects associated with the following resources:

- Air quality
- Energy
- Hazards and hazardous materials
- Hydrology and water quality

- Noise
- Transportation

Impacts associated with aesthetics, agricultural and forestry resources, biological resources, cultural resources, geology and soils, greenhouse gas emissions, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire were determined to be less than significant in the NOP; therefore, the proposed project would not have an adverse effect on any of these resources. Chapter 5, Additional Consequences of Project Implementation, includes a brief analysis as to why impacts on these issue areas would not be significant, as discussed in the NOP, which is included as Appendix A of this Draft EIR. Some thresholds for air quality, energy, hazards and hazardous materials, hydrology and water quality, and transportation were also determined to be less than significant in the NOP and included in Chapter 5. Impacts related to noise were also determined to be less than significant in the NOP; however, in response to public scoping comments, issues related to noise are addressed in Chapter 3.

1.5.1 Comments Received in Response to the Notice of Preparation

Several specific environmental issues were raised in the comments on the NOP. A summary of the comments is provided in Table 1-2, along with the title of the section where the comments are addressed in the Draft EIR. Only comments that pertain to the environmental scope of the Draft EIR are summarized. The NOP is included as Appendix A, and all NOP comment letters are provided in Appendix B of this Draft EIR.

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Subject of Comment	Relevant Draft EIR Chapter/Section
Federal		
Naval Base San Diego (NBSD), June 18, 2025	NBSD requested clarification on traffic patterns and the access driveway, distance from Navy fence, duration of lease, and protection of biological and archaeological resources. They requested clarification on the use and duration of diesel generators, noting potential understatements of impacts on air quality, greenhouse gas emissions, and energy policy consistency. They also asked for analysis of fire risks associated with battery energy storage systems, potential soil contamination and remediation needs, and impacts to emergency response coordination. They requested discussion of noise and traffic impacts in the EIR.	Chapter 2, Environmental Setting and Project Description Section 3.1, Air Quality Section 3.2, Energy Section 3.3, Hazards and Hazardous Materials Section 3.5, Noise Section 3.6, Transportation Chapter 5, Additional Consequences of Project Implementation

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Subject of Comment	Relevant Draft EIR Chapter/Section
State		
Native American Heritage Commission, June 19, 2025	Notification of tribal consultation requirements under Assembly Bill 52 to identify and protect tribal cultural resources. Recommended archaeological surveys, Sacred Lands File searches, and mitigation planning for potential impacts.	Chapter 2, Environmental Setting and Project Description Chapter 5, Additional Consequences of Project Implementation
California Department of Transportation (Caltrans), July 17, 2025	Provided comments focused on traffic analysis, safety, noise, environmental impacts, and right-of-way considerations. They requested a traffic impact study based on vehicle miles traveled.	Section 3.6, Transportation
Organizations		
Bali Express Services Inc., June 19, 2025	Commenter expressed support for the project and requested consideration of carrier access, infrastructure equity, evaluation of economic feasibility, and interagency coordination for grant delivery. They offered to serve as a strategic partner in project implementation.	Section 3.2, Energy Chapter 5, Additional Consequences of Project Implementation
Environmental Health Coalition, July 21, 2025	Requested analysis of potential air quality and health impacts from battery fires, especially near residences and schools. Also raised concerns about increased truck traffic from non-Port users and recommended prioritizing Port-serving trucks to reduce transportation impacts.	Section 3.1, Air Quality Section 3.3, Hazards and Hazardous Materials Section 3.6, Transportation
Individuals		
Mayor Ron Morrison, July 21, 2025	The commenter, Mayor Ron Morrison of National City, expresses strong opposition to the proposed location of the project and suggests it be placed at the 10th Ave Terminal. The comment outlines concern about environmental justice, emergency planning, the potential for lithium battery fires, increased truck traffic, road degradation, and lack of economic benefits.	Section 3.1, Air Quality Section 3.3, Hazards and Hazardous Materials Section 3.6, Transportation Chapter 6, Alternatives

Table 1-2. Summary of Notice of Preparation Comments Received

Commenter	Subject of Comment	Relevant Draft EIR Chapter/Section
Larry Emerson, July 21, 2025	Requested comparison of pollution from diesel/gas trucks versus electric trucks. Raised concerns about fire risks from battery energy storage and electric-vehicle batteries, recommending alternatives to reduce fire hazards.	Section 3.1, Air Quality Section 3.2, Energy Section 3.3, Hazards and Hazardous Materials Chapter 6, Alternatives
Martin Reeder, July 21, 2025	The commenter notes that the National City Traffic Engineer will need a formal traffic analysis that compares existing truck traffic to future truck traffic generated by the project. Additionally, the commenter provides attachments from the National City Fire Department outlining fire safety compliance requirements and operational recommendations. These include site access, emergency response planning, infrastructure standards, and code compliance measures necessary for permitting and safe operation of the facility.	Section 3.3, Hazards and Hazardous Materials Section 3.6, Transportation

1.6 Organization of the Draft Environmental Impact Report

The content and format of this Draft EIR are designed to meet the requirements of CEQA and state CEQA Guidelines Article 9. Table 1-3 summarizes the organization and content of the Draft EIR.

Table 1-3. Document Organization and CEQA Requirements

Draft EIR Chapter	Contents
Acronyms and Abbreviations	A list of acronyms and abbreviations is provided for the reader's reference immediately following the list of tables and figures in the Table of Contents.
Executive Summary	Includes a brief summary of the project; identifies the areas of controversy known to the lead agency, including issues raised by agencies and the public; outlines the conclusions of the environmental analysis; and summarizes of the project alternatives analyzed in the EIR. This chapter also includes a table summarizing all environmental impacts identified in

Table 1-3. Document Organization and CEQA Requirements

Draft EIR Chapter	Contents
	this EIR along with the associated mitigation measures proposed to reduce or avoid each impact.
Chapter 1 *Introduction*	Serves as a foreword to this EIR, introducing the purpose of CEQA, the project background, intended uses for this EIR, the scope and content of the EIR, and the organization of the EIR.
Chapter 2 *Environmental Setting and Project Description*	Describes the project location and physical environmental setting, lists the project's objectives and underlying purpose, provides a detailed description of the project's characteristics, and describes the required project approvals and project conditions.
Chapter 3 *Environmental Analysis*	Describes the existing conditions for each resource area, lists the applicable laws and regulations germane to the specific resource, describes the impact assessment methodology, lists the criteria for determining whether an impact is significant, identifies the direct and indirect significant impacts that would result from implementation of the project, and lists feasible mitigation measures that would eliminate or reduce the identified significant impacts.
Chapter 4 *Cumulative Impacts*	Analyzes the proposed project in addition to other cumulative projects in the surrounding area to determine potential impacts as a result of all the projects being implemented.
Chapter 5 *Additional Consequences of Project Implementation*	Addresses impacts that have been identified as significant and irreversible, discusses the project's growth-inducing impacts, and provides a brief discussion of the environmental resource impacts that were found to be not significant during preparation of this EIR.
Chapter 6 *Alternatives to the Proposed Project*	Provides a description of the alternatives to the proposed project, including the No Project Alternative, the No Interim Generator Alternative, and the Alternate Location Alternative; compares their impacts to the project; and identifies the environmentally superior alternative.
Chapter 7 *List of Preparers and Agencies Consulted*	Lists the individuals and agencies involved in preparing this EIR.
Chapter 8 *References*	Identifies all the materials referenced as part of the preparation of the EIR.
Appendices	Presents additional background information and technical materials for several of the resource areas.

Note: CEQA = California Environmental Quality Act.

2 Environmental Setting and Project Description

Skychargers LLC (Applicant) proposes to lease approximately 4.8 acres of an 8.2-acre parcel from the San Diego Unified Port District (District) to develop and operate the proposed Tidelands Avenue Electric Truck Hub (project). The proposed project would consist of the following: (1) zero-emissions vehicle (ZEV) truck charging and parking stalls, (2) a photovoltaic (PV) canopy, (3) a battery energy storage system (BESS), (4) a convenience store, and (5) infrastructure improvements. The proposed project is intended to serve electric trucks that frequently visit and serve the nearby marine terminals and other related storage facilities in the vicinity.

This chapter describes the location of the project site; outlines the project's objectives; provides an overview of project components, construction, operations, and decommissioning; lists the approvals that would likely be required; and details project conditions (PCs) that will be incorporated into the project as part of the Applicant's best practices and included as a condition of approval.

2.1 Environmental Setting

2.1.1 Project Location

The project site includes approximately 4.8 acres of lease area within an approximately 8.2-acre parcel, which is an existing paved site located at 1640 Tidelands Avenue (Assessor's Parcel Number 760-044-51-00) in the City of National City in San Diego County, California. National City is approximately 5 miles south of downtown San Diego, along San Diego Bay, and approximately 10 miles north of the U.S.–Mexico border. National City is bordered by the City of San Diego to the north and east, the City of Chula Vista to the south, the unincorporated areas of Lincoln Acres and Bonita to the south and southeast, and San Diego Bay to the west.

The project site is immediately south of the District's Port Operations Center building (formerly known as the Port's General Services building), located at 1400 Tidelands Avenue in National City. The site is bounded on the east by Tidelands Avenue, on the south by West 19th Street, and on the west by U.S. Naval Base San Diego. Gate 13, one of the U.S. Naval Base access gates, is at the west end of West 19th Street (see Figure 2-1, Project Location).

2.1.2 Existing Conditions

Project Site Conditions

The site falls within the National City Bayfront: Planning District 5 of the Port Master Plan, subarea Northern Industrial, and is zoned for Industrial, Maritime Related. Permitted uses include manufacturing, storage, transportation facilities, and distribution. The project is subject to a non-appealable Coastal Development Permit from the District.

The project site is currently developed with parking as an overflow roll-on/roll-off yard and a chassis storage facility (parking) for Pasha Automotive Services. There are no structures on the site. The project site is primarily paved with asphalt, with some landscape trees along the eastern border of the site, and it is fenced around its entire perimeter.

There are two designated truck routes: one truck route runs along Harbor Drive, then connects to adjacent freeways I-5 and I-15 via 28th or 32nd Streets in the City of San Diego or 8th Street in the City of National City, and the other truck route runs along Tidelands Avenue between 24th Street and Civic Center. The truck route along Harbor Drive is a right-of-way (ROW) controlled by the City of San Diego and the truck route along Tidelands Avenue is a ROW controlled by the City of National City. Enforcement of the Truck Routes is within the purview of the City of San Diego and National City, respectively, as they are located within ROW the District does not have direct enforcement authority for.

Surrounding Conditions

The land uses surrounding the project site include commercial, industrial, and military. BNSF Railway railroad tracks cross a portion of the site just before West 19th Street. The site is located less than 800 feet east of the Pacific Ocean, within the boundary of the Coastal Zone on filled tidelands held in trust by the District.

2.2 Project Description

2.2.1 Project Need and Purpose

The project purpose is to provide convenient electric charging for ZEV trucks operating at the nearby marine terminals and other associated facilities in the vicinity in alignment with the District's Maritime Clean Air Strategy (MCAS) and California's Sustainable Freight Action Plan. The project would include operational accommodations to further promote ZEV truck use such as opportunities for leasing ZEV trucks and the potential for priority charging for ZEV truck leases that are part of the Trucking as a Service (TaaS) program. The project would fill the need for ZEV truck charging as a necessary component of switching from combustion fuels to ZEVs in proximity to the intended demand that is currently unserved. The PV canopies and BESS are proposed to further promote the sustainability of the project, and the convenience store and restrooms are included as driver amenities.

2.2.2 Project Objectives

California Environmental Quality Act (CEQA) Guidelines Section 15124(b) requires project descriptions to contain a statement of objectives that includes the underlying purpose of the proposed project. The objectives of the proposed project are identified below:

1. Contribute to achieving the District's goal of electrifying the District's maritime operations, specifically the movement of goods via heavy-duty trucks.
2. Facilitate compliance with the District's long-term emissions goals for maritime operations.
3. Reduce criteria pollution emissions and improve air quality and health benefits in the Portside Community and greater San Diego Air Basin.
4. Design a truck charging hub utilizing industry best practices for safety, including first-move-forward and pull-through parking areas.
5. Provide health equity through decarbonization and lowering pollution in historically poor air quality zones and communities.
6. Support the MCAS long-term goal to achieve 100% ZEV heavy-duty truck trips by 2030 to the marine cargo terminals and advance MCAS Truck Goal 2, which focuses on facilitating the deployment of infrastructure to support the transition to ZEV trucks.

7. Provide a size and scale that achieves a development cost efficiency and an affordable, sustainable energy source for operators.
8. Generate and store zero-carbon electricity on site to supplement utility power and lower the carbon intensity of energy provided on site.
9. Prioritize access to charging infrastructure for ZEV truck operators visiting one of the District's marine cargo terminals and maximize charging utilization.
10. Provide small-fleet and independent ZEV truck operators with a safe, fast, and reliable charging facility in close proximity to the marine cargo terminals.
11. Support the District's consistency with the California Sustainable Freight Action Plan.
12. Utilize awarded grant funding and meet contractual obligations to construct 70 ZEV truck charging stalls in an expeditious manner.

2.3 Project Components

The proposed project would consist of the following: (1) ZEV truck charging and parking stalls, (2) a PV canopy, (3) a BESS, (4) a convenience store, and (5) infrastructure improvements associated with roads and utilities (Figure 2-2, Proposed Site Plan, and Figures 2-3A through 2-3E, Project Renderings [for illustrative purposes only]). The following subsections describe the project components in more detail.

2.3.1 Electric Truck Charging

The proposed project includes the construction of 70 electric truck charging stalls. All 70 charging stalls would be able to charge trucks simultaneously. The site would contain 38 ZEV charging positions for trucks with trailers and 32 ZEV truck charging positions for truck cabs only. Of the 38 charging positions for trucks with trailers, 26 would be pull-through positions, meaning that no reversing would be necessary. The other 12 charging positions for trucks with trailers would need to be reversed into. Of the 32 ZEV truck charging positions for truck cabs only, 10 would be pull-through positions and the other 22 would be standard spaces (typically head-in parking, or back-in, depending on the charge connection location on the truck). The majority (46) of the positions would be equipped with 150-kilowatt (kW) capable chargers intended for overnight charging. All other positions (24) would be equipped with 350 kW chargers, for faster charging.

2.3.1.1 Trucking as a Service Program

The TaaS program is a service provided by the Applicant where a standard monthly fee is charged to truckers and in return the truck operator gets a fully charged and maintained truck to use. The program may also include the option for truck operators to own the ZEV truck at the end of the lease. Trucks that are a part of the TaaS program may be charged overnight in the overnight charging stalls. Other, faster charging portals would be available for "opportunity charging" to quickly provide additional charge as needed. Priority would be for ZEV trucks serving the District and the additional ZEV truck charging infrastructure on site would be available to support other local businesses with truck fleets, as well as passenger vehicles dependent on available capacity. Up to 30 trucks are anticipated to use the site during the initial operating year as part of the TaaS program. Gradually, an additional 16 trucks may be added to the program over the next 3 to 5 years. As part of the TaaS program, participating operators may have assigned, dedicated parking/charge stalls, and participating trucks will have priority for the charging stalls over all other vehicles not part of the TaaS program. The site would be equipped with gates that may be used for access control as needed to enforce the priority.

2.3.2 Photovoltaic Canopies

Solar PV canopies would cover 46 of the truck charging positions and would convert sunlight into electricity (Figure 2-4, Proposed Solar PV Canopy Plan). The maximum system power is expected to be approximately 1,750 kW direct current (DC).

2.3.3 Battery Energy Storage System

The BESS is anticipated to have up to a 2.8-megawatt capacity and could store up to 6.8 megawatt-hours in a containerized storage system using lithium-ion technology and lithium iron phosphate (LFP) chemistry. The containers are expected to include a battery, a power and battery management system, and a power conditioning system for conversion of alternating current (AC) to DC. Integrated fire detection and mitigation systems will be supplemented with external, specialized fire detection cameras and other response measures identified in the Hazard Mitigation Analysis (Appendix D4).

2.3.4 Convenience Store

The project site would also feature a maximum 5,000-square-foot space for a convenience store with restrooms, shower facilities with access control, and an external picnic area.

2.3.5 Infrastructure Improvements

Access

Vehicular access to the project site would continue to be from Tidelands Avenue. Specifically, an ingress would be available at the northern portion of the site and an egress would be located near the southern portion of the site off Tidelands Avenue (see Figure 2-2). There are two additional existing gates on the southern half of the parcel available for continued operations by Pasha Automotive Group.

Electricity

San Diego Gas and Electric (SDG&E) would provide electricity service to the proposed project. Electricity would be extended to the project site from existing local distribution systems in the region. The existing east–west SDG&E electrical transmission easement on the project site would not be altered as part of the proposed project. New electrical facilities would be installed on the project site in joint utility trenches that would be located in public rights-of-way, as required by the City of National City. In conjunction with electricity, internet facilities would be installed in the joint utility trenches.

Interim Generator

In the interim, the project would need supplemental power should sufficient utility power not be available at the start of operation. A single 891-horsepower diesel generator would be operated up to 10 hours per day for up to 6 months during the start of operation. The diesel generator would be equipped with a California Air Resources Board certified level 3 diesel particulate filter. After the initial 6-month period, it is anticipated that sufficient power from on-site solar generation, the BESS, and grid supply would be available to fully support project operations.

Water

The proposed project would receive water from the Sweetwater Authority. A new water connection to available service within the adjacent street would be constructed.

Sewer

The proposed project would receive sewer service from the City of National City. Off-site sewer system improvements for the proposed project would be limited to a new connection line from the restrooms to the existing system within the adjacent street.

Storm Drainage

A portion of the site would be landscaped and used as a stormwater retention basin and approximately 0.15 acres of the site would be green space. The proposed project would generally maintain existing drainage patterns. Site drainage would be directed on site via overland flow, surface swales, curbs and gutters, and the private storm drain system. The on-site storm drains would collect runoff and convey it to proposed proprietary biofiltration units for treatment prior to discharging into the on-site green space(s), prior to reaching San Diego Bay.

Lighting

Area lighting would follow industry-accepted lighting practices and lighting levels. Security lighting would also be installed throughout the site. All lighting installed at the project site would be downward facing and shielded from spilling into adjacent properties, specifically Navy Base San Diego, as required.

Security

A video surveillance system would be installed with the primary objective of deterring theft, damage to, or vandalism of electric truck charging equipment and associated infrastructure. The system components would be positioned to avoid surveillance of the adjacent Navy Base San Diego. In addition, the facility would be entirely fenced including fencing along the westward (U.S. Navy) property line. Fencing along the southern project boundary and a portion of the western boundary would be sufficiently screened to avoid vehicle headlamp spillage into the Naval Base, specifically avoiding light shining onto the military working dog kennel located to the southwest of the proposed project.

Signage

Proposed signage would include on-site and off-site signage in various forms, including wall signs, digital displays, charging stalls identification, entry and exit identification, and wayfinding signage.

Landscaping

Currently, the site contains asphalt and limited landscaping. Trees are planted along Tidelands Avenue adjacent to the site. The project's landscaping would include grasses and ground cover across the 0.15-acre green space.

2.4 Project Construction

Construction would consist of site preparation that includes repair or resurfacing of approximately 4 acres of existing asphalt; the rest of the site's existing asphalt would be retained. All retained asphalt would remain in place

during construction and would be improved with pre-cast or cast-in-place concrete foundations for the charging stalls, parking areas for the charging infrastructure, and related facilities for the project.

After site preparation, construction activities would consist of installation of chargers; installation of PV canopies; installation of the BESS; construction of the convenience store, including restrooms; and infrastructure improvements, including utility routing, storm drainage, and landscaping.

The existing site would be sufficient for use as a laydown yard. No off-site improvements are anticipated associated with this project, aside from utility connections within Tidelands Avenue. Construction worker parking would be accommodated on site.

Construction is expected to take approximately 9 months and would begin in 2026 and finish by 2027.

2.5 Project Operation

Operation of the project would consist of charging up to 70 electric trucks simultaneously. Of the 70 charging positions, 46 would be intended for overnight use and would be reserved in advance or dedicated to specific (leased) electric trucks to ensure that truck charging needs are met. The primary use of the facility is for electric trucks and terminal-bound or terminal-originating electric trucks. As an accessory, or secondary, use of the facility, based on availability the remaining charging positions may be used for charging all electric vehicles, including passenger vehicles, municipal/government fleet vehicles, and heavy- and medium-duty trucks not serving one of the marine cargo terminals.

The PV canopies would generate electricity to be directed to the chargers and the BESS during the day. During overnight and peak utility hours, the BESS would release and provide electricity to the chargers. The proposed convenience store and associated restrooms/showers would provide convenient amenities for the drivers. There would be up to eight standard parking spaces, including two Americans with Disabilities Act (ADA) compliant spaces adjacent to the store, which would be available for employees and on-site maintenance vehicles.

Ongoing operation and maintenance of the project would include inspection, maintenance, and repair of the chargers, PV canopies, BESS, and all other associated safety equipment. Operations would also include stocking of the convenience store, maintenance and cleaning of the convenience store and restrooms, and attendance to landscaping and stormwater facilities. The project proponent, Skychargers LLC, would construct the project and operate and maintain the project under a long-term lease from the District.

2.6 Decommissioning

Since the District is leasing the premises to the Applicant for an anticipated term of 20 years (plus optional extensions), once operations at the project site are permanently terminated following termination of the lease, the facility would be decommissioned if the lease is not renewed. Decommissioning would include the removal of ZEV charging equipment, PV canopies, the BESS, and associated infrastructure.

Materials used in the project, such as metals, glass, and electrical equipment, are expected to be recyclable or suitable for salvage. Any components that require special handling, such as BESS batteries or equipment containing oils, would be removed and managed in accordance with applicable regulations at the time of decommissioning.

Decommissioning would follow standard construction and demolition practices and would be carried out by the Applicant or a future operator, in coordination with the District and other relevant agencies.

2.7 Required Project Approvals

As the lead agency under CEQA, the District would be responsible for carrying out the proposed project and permitting. As a responsible agency under CEQA, the City of National City would be responsible for approvals associated with features of the proposed project that fall within its permitting authority, primarily pertaining to the issuance and inspection of construction/building permits. The permits and approvals described in Sections 2.7.1 through 2.7.3 would be required to implement the proposed project.

2.7.1 San Diego Unified Port District

As the CEQA lead agency, the District would use this documentation in its decision to approve the required discretionary permits. The following permits and approvals may be required by the District for implementation of the proposed project:

- Certification of the Environmental Impact Report (EIR)
- Adoption of the Mitigation Monitoring and Reporting Program
- Adoption of the Findings of Fact
- Adoption of the Statement of Overriding Considerations, if applicable
- Approval of the proposed project
- Approval of a non-appealable Coastal Development Permit
- Approval of a lease and other necessary real estate agreements
- Approval of stormwater quality management plan (post-construction best management practices)

2.7.2 City of National City

The City of National City may be a responsible agency under CEQA and would use this EIR and supporting documentation in its approval decisions. The following permits and approvals may be required by the City of National City for implementation of the proposed project:

- Responsible agency findings and consideration of the EIR
- Approval of off-site utility, access, and maintenance easements
- Issuance of ministerial permits (including building and grading permits)

2.7.3 Federal and State Agencies

Prior to construction of the proposed project, the project proponents may be required to obtain the permits and approvals from state and federal agencies that include, but may not be limited to, the following:

- Federal Emergency Management Agency, Region 9: National Flood Building Code
- State Water Resources Control Board: National Pollutant Discharge Elimination System General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit)

- California Department of Transportation: overweight/oversized loads on highways
- San Diego County Air Pollution Control District: Authority to Construct/Permit to Operate

2.8 Project Conditions

In addition to the Special Provisions and Short Term Construction Measures that are standard conditions within Coastal Development Permits issued by the District, the following Project Conditions will also be required during construction and or operation of the proposed project.

2.8.1 Fire Protection Features

A Hazard Mitigation Analysis and Emergency Response Plan (Appendices D4 and D5) prepared for the project provide fire planning guidance, including requirements for reducing fire risk, an evaluation of fire protection services response, and requirements for provision of evacuation. Implementation of and adherence to the provisions of the Emergency Response Plan and Hazard Mitigation Analysis is required. Site access, including internal project roadways, emergency access roads, and site access points, would comply with the requirements of the California Fire Code and the National City Municipal Code adopted at the time an application for building permits is filed.

PC-HAZ-1: Hazard Mitigation Analysis Provisions. The Hazard Mitigation Analysis shall be finalized, prior to construction, in response to applicable comments received during environmental review, including amendments requested by the Port District's Office of Homeland Security and/or Harbor Police and the National City Fire Department. All provisions of the HMA shall be followed for construction and operation of the proposed project.

PC-HAZ-2: Emergency Response Plan. The Emergency Response Plan shall be finalized, prior to construction, in response to applicable comments received during environmental review, including amendments requested by the Port District's Office of Homeland Security and/or Harbor Police and the National City Fire Department. All provisions of the ERP shall be followed for construction and operation of the proposed project.

2.8.2 Stormwater and Pollution-Control Features

The proposed project would implement the following Project Conditions related to stormwater:

PC-HYD-1: Stormwater Pollution Prevention Plan. A project-specific Stormwater Pollution Prevention Plan (SWPPP) in compliance with the effective Construction General Permit and Jurisdictional Runoff Management Programs for National City will be prepared and implemented. The SWPPP will identify which construction best management practices (BMPs) will be implemented to prevent stormwater runoff, and will include a monitoring plan for measuring BMP effectiveness. BMPs will include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The construction SWPPP will also specify properly designed, centralized storage areas that will keep these materials out of the rain. Measures will include a range of stormwater control BMPs, such as installing erosion-control materials (e.g., silt fences, staked fiber rolls, geofabric) to prevent silt runoff to storm drains and waterways, as well as sediment basin BMPs (e.g., sediment basins, check dams, sediment traps).

PC-HYD-2: Storm Water Quality Management Plan. A Priority Development Project Storm Water Quality Management Plan (SWQMP) will be prepared that identifies site design and source- and pollutant -control best management practices (BMPs) to reduce the discharge of pollutants to the maximum extent practicable. The SWQMP will incorporate the following quantifiable and nonquantifiable sustainability features that will manage stormwater source and pollutant loads:

- Prevent illicit discharges into the Municipal Separate Storm Sewer System (MS4).
- Install storm drain stenciling or signage.
- Protect outdoor materials storage areas from rainfall, run-on, runoff, and wind dispersal.
- Protect materials stored in outdoor work areas from rainfall, run-on, runoff, and wind dispersal.
- Protect trash storage areas from rainfall, run-on, runoff, and wind dispersal.

In addition, as identified in the project-specific Priority Development Project SWQMP, the proposed project will implement site-design BMPs, where applicable and feasible. Site-design BMPs include the following:

- Maintain natural drainage pathways and hydrologic features.
- Conserve natural areas, soils, and vegetation.
- Minimize impervious areas.
- Minimize soil compaction.
- Incorporate impervious area dispersion.
- Install landscaping with native and/or drought-tolerant species.

Low-impact development and stormwater pollutant control BMPs designed to retain, biofilter, and treat stormwater runoff generated on the project site will be implemented. Applicable BMPs are identified in the National Pollutant Discharge Elimination System permit (MS4 Permit) to San Diego area municipal co-permittees (Order No. R9-2015-0100), following the District 2025 BMP Design Manual.

2.8.3 Tribal Cultural Resources

The proposed project would implement the following Project Condition related to tribal cultural resources:

PC-TCR-1: Tribal Cultural Resources Monitoring. The project applicant shall retain and compensate for the services of a Tribal cultural monitor. The Tribal cultural monitor must be present during all ground-disturbing activities that penetrate existing pavement with the potential to encounter tribal cultural resources. The project applicant shall contact the Tribal representatives a minimum of seven days prior to beginning ground disturbing activities. Construction activities will proceed if no response is received 48 hours prior to such activities.

In the event that yet unknown and unanticipated tribal cultural resources (sites, features, or artifacts) are inadvertently exposed during ground-disturbing activities for the project, all construction work occurring within 50 feet of the find shall immediately stop until the Tribal cultural monitor can evaluate the significance of the unanticipated resource.

If a resource is deemed significant by the Tribal cultural monitor, preservation in place or avoidance of the resource shall be the preferred method of preservation consistent with California Public Resources Code Section 21083.2(b). If preservation in place or avoidance is not feasible, treatment may include implementation of data recovery excavations to remove the resource. This will reduce any potential significant impacts to a level of less than significant by ensuring that any significant resource discovered is either avoided, preserved in place, or removed so that there will be no substantial adverse change in the significance of the resource.

The methods and results of the data recovery excavation shall be included in a monitoring report, to be completed by the Tribal cultural monitor after completion of the project. The monitoring report shall include a description of resources recovered, treatment of the resources, and evaluation of the resources. Upon completion of the project, all appropriate documentation (e.g., reports, site records) shall be submitted to the South Central Coastal Information Center.

2.8.4 Light and Glare

The proposed project would implement the following Project Conditions related to site lighting:

PC-LIT-1: All lighting shall be directed toward on-site facilities and will avoid spilling into adjacent properties, especially Naval Base San Diego.

PC-LIT-2: Screening from headlamps (trucks and autos) shall be provided along the south and western project area perimeters so that the Working Dog Kennel is not exposed to headlamp light during nighttime hours.

2.8.5 Flight Safety

The proposed project would implement the following Project Condition related to flight safety:

PC-FS-1: The applicant will provide either of the following to the District:

- Federal Aviation Administration Determination of No Hazard to air navigation with no conditions; or
- Certification by an appropriate licensed professional, in the State of California, that there is no need to file notice for construction or alteration per Title 14 Code of Federal Regulations Section 77.9(e)(1)

2.8.6 Truck Route Use

The proposed project would implement the following Project Conditions related to educating patrons about the use of designated Truck Routes:

PC-TR-1: The Applicant shall ensure participants of the TaaS program and users of the opportunity charging stalls are educated about use and adherence to the designated truck routes along the waterfront by posting and maintaining signage on site that clearly shows the designated truck routes within

the general vicinity of the project site and how to access the local freeway network via theses designated routes.

PC-TR-2: Participants of the TaaS program will be provided information (i.e., maps, literature, weblinks) regarding the designated truck routes within the general vicinity of the project site at the time of joining the TaaS Program and how adherence to the truck routes is expected from all Tidelands Avenue Electric Truck Hub patrons.

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SOURCE: USGS National Map 2025

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0 1,000 2,000 Feet

FIGURE 2-1

Project Location

Tidelands Avenue Electric Truck Hub

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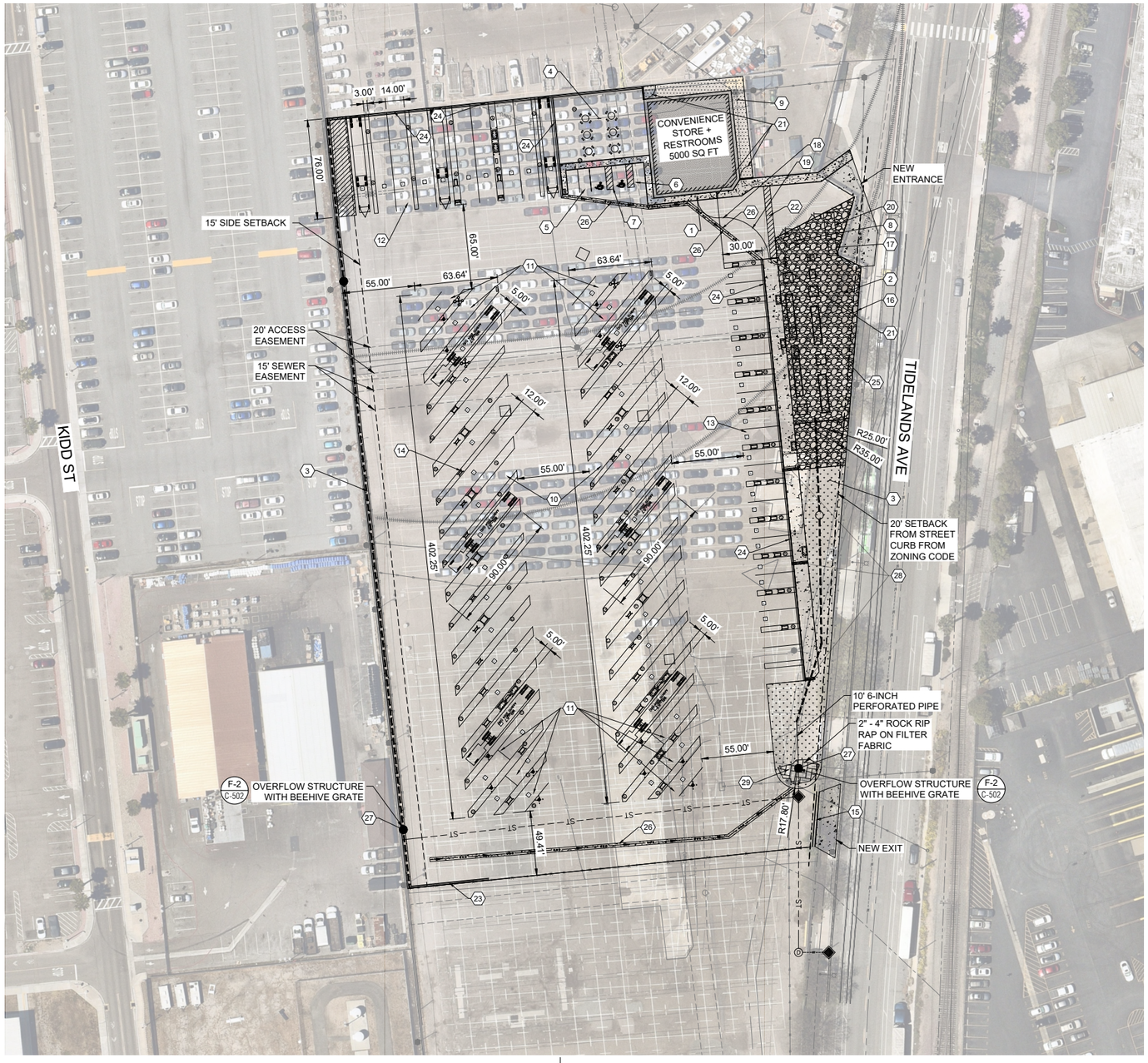

NORTH

OVERALL SITE PLAN

0 20' 40' 80'

SCALE IN FEET

NOTES

1. THE EXISTING INFORMATION SHOWN ARE PER RECORD DRAWINGS AND DRAWN TO THE CLOSEST ACCURACY AND WITHOUT ANY HORIZONTAL CONTROL

LEGEND AND ABBREVIATIONS

- EXISTING WATER LINE
- EXISTING OVERHEAD ELECTRICAL LINE
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING SANITARY SEWER LINE
- EXISTING RAIL SPUR
- EASEMENT
- EXISTING UTILITY POLE
- EXISTING SANITARY MANHOLE
- EX — EXISTING WATER LINE
- LEASE LIMIT LINE
- CHAINLINK FENCE
- FLOW LINE
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT/SIDEWALK
- VEGETATED AREA
- BUILDING
- GRAVEL
- RIP RAP
- (D) STORM MANHOLE
- STORM INLET
- ST — STORM PIPE

CONSTRUCTION NOTES (#)

1. CONCRETE SIDEWALK
2. ELECTRICAL EQUIPMENT YARD
3. LANDSCAPING/BIO FILTRATION BASIN WITH MEDIA AND UNDER DRAIN FOR STORMWATER TREATMENT
4. PICNIC AREA
5. 90° PARKING SPACE
6. ACCESSIBLE PARKING SPACE
7. VAN ACCESSIBLE PARKING SPACE
8. TRASH ENCLOSURE
9. ASPHALT PAVEMENT
10. PULL THROUGH TRUCK+TRAILER PARKING SPACES (12 TYP.)
11. PULL THROUGH TRUCK ONLY PARKING SPACES (12 TYP.)
12. OVERNIGHT TRUCK+TRAILER PARKING SPACES (14 TYP.)
13. OVERNIGHT TRUCK ONLY PARKING SPACES (22 TYP.)
14. BOLLARD (TYP)
15. 24' WIDE SLIDING GATE
16. CHAINLINK FENCE WITH GATE
17. 12'x6' PARKING SPOT WITH A CHARGER
18. 15' SWING GATE
19. 35' SWING GATE
20. 20'x8' STORAGE CONTAINER
21. MAIN GATE
22. PEDESTRIAN PATH
23. CURB
24. CURB AND GUTTER
25. GRAVEL
26. SWALE
27. OVERFLOW STRUCTURE WITH BEEHIVE GRATE
28. TRENCH DRAIN
29. RIP RAP

SOURCE: Burns McDonnell 2025

FIGURE 2-2

Proposed Site Plan

Tidelands Avenue Electric Truck Hub

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SOURCE: Skychargers, LLC 2025

FIGURE 2-3A

Project Renderings

Tidelands Avenue Electric Truck Hub

DUDEK

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SOURCE: Skychargers, LLC 2025

FIGURE 2-3B

Project Renderings

Tidelands Avenue Electric Truck Hub

DUDEK

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SOURCE: Skychargers, LLC 2025

FIGURE 2-3C

Project Renderings

Tidelands Avenue Electric Truck Hub

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SOURCE: Skychargers, LLC 2025

FIGURE 2-3D

Project Renderings

Tidelands Avenue Electric Truck Hub

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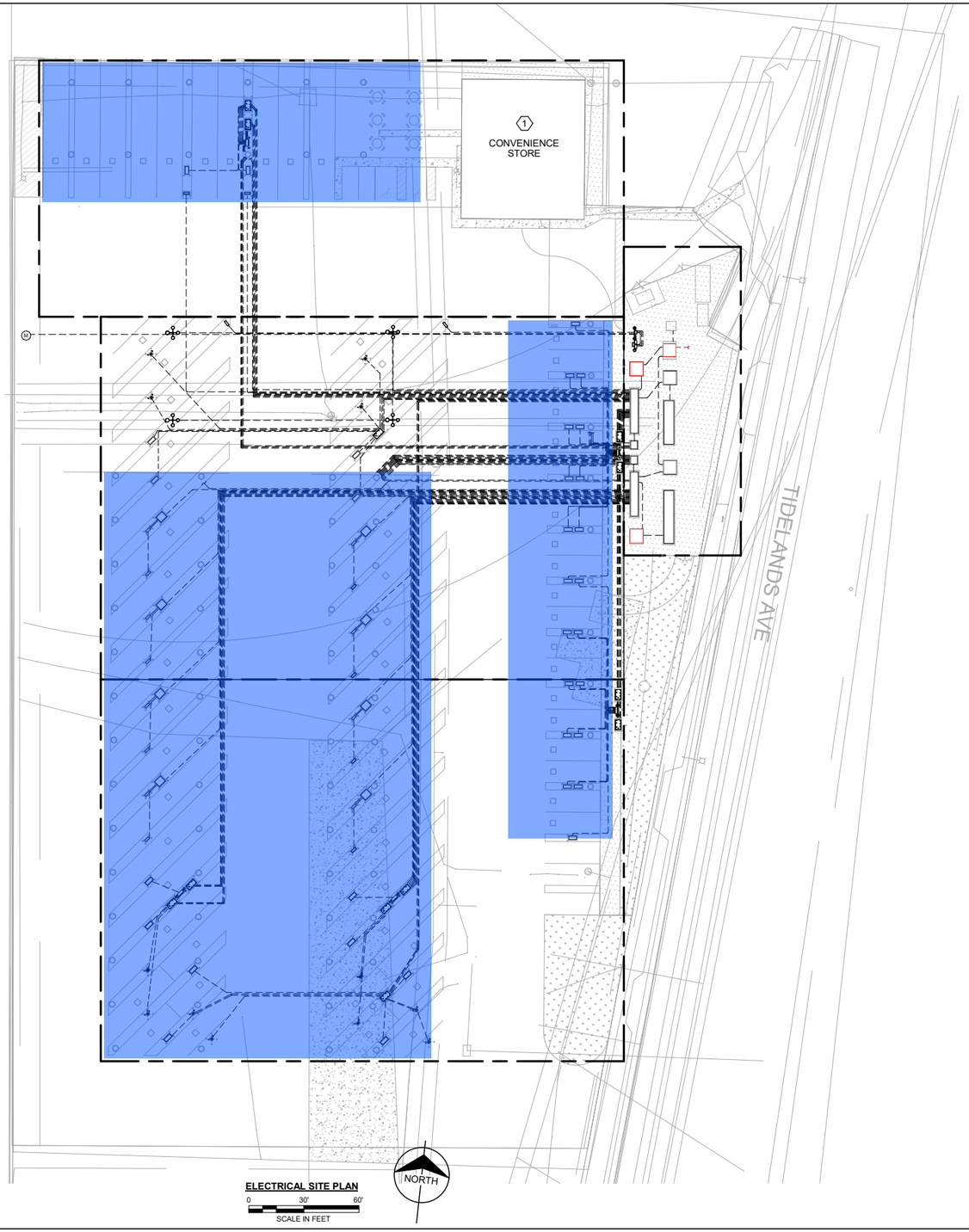

1. ITEMS SHOWN IN BLACK LINEWEIGHT SHALL BE NEW, PROVIDED BY THE ELECTRICAL SUBCONTRACTOR UNLESS OTHERWISE NOTED. ITEMS SHOWN IN RED ARE TO BE PROVIDED BY SDGE. ITEMS SHOWN IN HALFTONE ARE EXISTING OR PROVIDED BY OTHERS.
2. SEE E-001 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND NOTES.
3. SUBCONTRACTOR TO VERIFY EXISTING UTILITIES PRIOR TO COMMENCING WORK.
4. SEE E-600 - E-604 FOR ELECTRICAL ONE LINE DIAGRAMS.
5. SEE E-700, E-701 AND E-702 FOR ELECTRICAL CIRCUIT AND PANEL SCHEDULES.

KEYED NOTES: (#)

1. CONVENIENCE STORE AND RESTROOMS COVERED UNDER SEPARATE PERMIT.

PRELIMINARY - NOT FOR CONSTRUCTION

SOURCE: Burns & McDonnell 2025

FIGURE 2-4

Proposed Solar PV Canopy Plan

Tidelands Avenue Electric Truck Hub

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3 Environmental Analysis

Introduction

This chapter provides an analysis of the potential environmental impacts that may occur as a result of implementation of the proposed Tidelands Avenue Electric Truck Hub Project (project). Each issue analysis section includes a description of existing conditions; the criteria for the determination of impact significance; evaluation of potential project impacts, including mitigation measures (if applicable) that would reduce or avoid significant environmental impacts; and a conclusion of significance after mitigation for impacts identified as requiring mitigation (if applicable).

Potential Environmental Impacts

This chapter includes an analysis of the potential environmental impacts of the proposed project for the following resource topics:

- 3.1, Air Quality
- 3.2, Energy
- 3.3, Hazards and Hazardous Materials
- 3.4, Hydrology and Water Quality
- 3.5, Noise
- 3.6, Transportation

It was determined in the Notice of Preparation (NOP)/Initial Study for the project (Appendix A) and through public scoping that the proposed project would have no impact or less-than-significant impacts associated with the following topics: aesthetics, agricultural and forestry resources, biological resources, cultural resources, geology and soils, greenhouse gas emissions, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire. These topics are described in Section 5.5, Effects Found Not to Be Significant, of this Draft Environmental Impact Report (EIR).

Format of the Environmental Analysis

Each of the six environmental topic sections of this chapter includes the following subsections.

Overview

This introductory section briefly describes the criteria considered in the particular resource section, identifies the resources used to compile the information presented for the environmental analysis, and summarizes the potentially significant environmental effects of the proposed project and any feasible mitigation measures, if applicable.

Existing Conditions

According to Section 15125 of the California Environmental Quality Act (CEQA) Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the "baseline condition" against which project-related impacts are compared. Normally, the baseline condition is the physical

condition that exists when the NOP is published; however, a different baseline may be used in specific cases where it is deemed appropriate. Unless otherwise indicated, the environmental setting described in each of the following sections will be that which existed on the date the NOP was published.

Applicable Laws and Regulations

This subsection provides a summary of regulations, plans, policies, and laws at the federal, state, and local levels that are relevant to proposed project as they relate to the particular environmental resource area in discussion. To the extent applicable laws and regulations impose a mandatory obligation, compliance is assumed in the Project impact analysis because it is required by law and specified in a tenant lease, and mitigation would generally not be required when an existing law or regulation would ensure that a significant impact would not occur.

Project Impact Analysis

This subsection describes the methodology used for the analysis of the potential environmental impacts of the proposed project; identifies the criteria for determining the significance of potential impacts; and states a conclusion as to whether the environmental impacts would be considered significant and unavoidable, less than significant with mitigation incorporated, less than significant, or no impact (see definitions below). Each topic analyzed is divided into specific issues, based on potential impacts, and is separated by construction and operation impacts wherever relevant. The discussion of potential impacts is based on the applicable threshold of significance (see below) for each issue. Where potential impacts are significant, mitigation measures are identified, as feasible, to minimize, rectify, reduce, eliminate, or compensate for the significant impacts with the goal of reaching a less-than-significant impact determination.

Methodology

Each methodology subsection describes the means used to analyze potential impacts on a particular resource, discussing the steps followed and listing any studies relied on for arriving at conclusions as to significance.

Thresholds of Significance

Thresholds of significance are criteria used to assess whether potential environmental effects are significant. The significance criteria used in this analysis are primarily based on the recommendations provided in Appendix G of the CEQA Guidelines. The thresholds of significance define the type, amount, and/or extent of impact that would be considered a significant adverse change in the environment. The thresholds of significance for some environmental topics, such as air quality and noise, are quantitative, while those for other topics, such as hazards and hazardous materials, are qualitative. The thresholds of significance are intended to assist the reader in understanding how an impact is determined to be significant.

Project Impacts and Mitigation Measures

The analysis of environmental impacts considers both the construction and operation of the proposed project. As required by Section 15126.2(a) of the CEQA Guidelines, direct, indirect, short-term, long-term, on-site, and/or off-site impacts are addressed, as appropriate, for the environmental issue being analyzed. This EIR uses the following terms to describe the level of significance of impacts identified during the course of the environmental analysis:

- No Impact. This term is used when the project's construction and/or operation would have no adverse effect on a resource.

- **Less Than Significant.** This term is used to refer to impacts resulting from implementation of the proposed project that are not likely to exceed the defined thresholds of significance, and potentially significant impacts that are reduced to a level that does not exceed the defined thresholds of significance after implementation of mitigation measures. In the latter case, the determination may also be stated as "less than significant with mitigation incorporated."
- **Significant.** This term is often used to refer to impacts resulting from implementation of the proposed project that exceed the defined thresholds of significance and can be applied before identification of any mitigation measures. A significant effect is defined by Section 15382 of the CEQA Guidelines as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment [but] may be considered in determining whether the physical change is significant." For impacts that exceed a threshold of significance, feasible mitigation measures that avoid or reduce the potential impact are identified, which may cause the impact to be reclassified as less than significant if it is sufficiently reduced, or the impact may remain significant, in which case it is referred to as a significant and unavoidable impact (or unavoidable significant impact).
- **Significant and Unavoidable.** This term is used to refer to significant impacts resulting from implementation of the proposed project that cannot be eliminated or reduced to below standards of significance through implementation of feasible mitigation measures.
- **Mitigation Measures.** Section 15126.4 of the CEQA Guidelines requires an EIR to "describe feasible measures which could minimize significant adverse impacts." Mitigation includes avoiding an impact altogether, minimizing impacts, rectifying impacts, reducing or eliminating impacts over time, or compensating for impacts by replacing or providing substitute resources. The CEQA Guidelines define feasibility as "capable of being accomplished in a successful manner within a reasonable period of time taking into account economic, legal, social, technological, or other considerations." This subsection lists the mitigation measures that could reduce the severity of impacts identified in the Project Impact Analysis subsection. Mitigation measures are the specific environmental requirements for construction or operation of the proposed project that will be included in the Mitigation Monitoring and Reporting Program and adopted as conditions of approval of the proposed project.

Level of Significance After Mitigation

The final significance finding after any required mitigation measures are applied is stated in this final section.

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3.1 Air Quality

3.1.1 Overview

This section summarizes technical information from the Air Quality, Greenhouse Gas, and Energy Technical Report (Appendix C to this Draft Environmental Impact Report [EIR]) and describes the existing air quality conditions of the proposed Tidelands Avenue Electric Truck Hub Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project. No significant air quality impacts have been identified herein and no mitigation measures are thus required.

3.1.2 Existing Conditions

3.1.2.1 Climate and Atmospheric Conditions

Regional

The project site is located within the San Diego Air Basin (SDAB) and is subject to San Diego County Air Pollution Control District (SDAPCD) guidelines and regulations. The SDAB is bordered by the Pacific Ocean to the west, the South Coast Air Basin to the north, the Salton Sea Air Basin to the east, and the U.S.-Mexico border to the south. The average temperature ranges (in Fahrenheit [°F]) from the mid-40s to the high 90s. Most of the region's precipitation falls from November to April with infrequent (approximately 10%) precipitation during the summer. The average seasonal precipitation along the coast is approximately 10 inches; the amount increases with elevation as moist air is lifted over the mountains to the east.

The climate of San Diego is classified as Mediterranean, but it is incredibly diverse because of the topography. The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east. Along with local meteorology, the topography influences the dispersal and movement of pollutants in the SDAB. The mountains to the east prohibit dispersal of pollutants in that direction and help trap them in inversion layers as described in the next section.

The climate is dominated by the Pacific High-pressure system that results in mild, dry summers and mild, wet winters. The Pacific High drives the prevailing winds in the SDAB. The winds tend to blow onshore during the daytime and offshore at night. In the fall months, the SDAB is often impacted by Santa Ana winds. These winds are the result of a high-pressure system over the Nevada–Utah region that overcomes the westerly wind pattern and forces hot, dry winds from the east to the Pacific Ocean (SDAPCD 2015). The winds blow the air basin's pollutants out to sea. However, a weak Santa Ana can transport air pollution from the South Coast Air Basin and greatly increase the San Diego ozone (O_3) concentrations. A strong Santa Ana also primes the vegetation for firestorm conditions.

Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created because of emissions of carbon monoxide (CO) and oxides of nitrogen (NO_x). CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are elevated because of cold temperatures and the large number of motor vehicles traveling. Higher CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the basin are

associated with heavy traffic. Nitrogen dioxide (NO_2) levels are also generally higher during fall and winter days when O_3 concentrations are lower.

3.1.2.2 Regional and Local Air Quality Conditions

San Diego Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act (CAA) amendments, the U.S. Environmental Protection Agency (EPA) classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on California Ambient Air Quality Standards (CAAQS) rather than the NAAQS. Table 3.1-1 depicts the current attainment status of the SDAB with respect to the NAAQS and CAAQS.

Table 3.1-1. San Diego Air Basin Attainment Classification

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone (O_3) – 1 hour	Attainment	**Nonattainment**
O_3 – (8 hour)	**Nonattainment (severe)**	**Nonattainment**
Nitrogen Dioxide (NO_2)	Unclassifiable/attainment	Attainment
Carbon Monoxide (CO)	Attainment (maintenance)	Attainment
Sulfur Dioxide (SO_2)	Unclassifiable/attainment	Attainment
Coarse Particulate Matter (PM_{10})	Unclassifiable/attainment	**Nonattainment**
Fine Particulate Matter ($PM_{2.5}$)	Unclassifiable/attainment	**Nonattainment**
Lead	Unclassifiable/attainment	Attainment
Hydrogen Sulfide	No federal standard	Attainment
Sulfates	No federal standard	Unclassified
Visibility-Reducing Particles	No federal standard	Unclassified
Vinyl Chloride	No federal standard	No designation

Sources: EPA 2025 (federal); CARB 2025a (state).
Notes: Attainment = meets the standards; Attainment/maintenance = achieve the standards after a nonattainment designation; Nonattainment = does not meet the standards; Unclassified or Unclassifiable = insufficient data to classify; Unclassifiable/attainment = meets the standard or is expected to be meeting the standard despite a lack of monitoring data.
If nonattainment for federal standards, a clarifying classification will be provided indicating the severity of the nonattainment status.

Local Ambient Air Quality

California Air Resources Board (CARB), air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. Local ambient air quality is monitored by the SDAPCD. The

SDAPCD operates a network of ambient air monitoring stations throughout the County that measure ambient concentrations of pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The nearest SDAPCD-operated monitoring station to the proposed project is the Chula Vista monitoring station, which is located approximately 5 miles southeast of the project site. This Chula Vista monitoring station was used to show the background ambient air quality for O_3, coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and NO_2 for the project site. The monitoring station located on First Street (12 miles east of the project site) is the closest to the proposed project that monitors sulfur dioxide (SO_2). The San Ysidro monitoring station is the closest to the site that monitors CO. Table 3.1-2 presents the most recent background ambient air quality data and number of days exceeding the ambient air quality standards from 2022 to 2024.

Table 3.1-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year[c]		
				2022	2023	2024	2022	2023	2024
Ozone (O_3) – Chula Vista									
Maximum 1-hour Concentration	ppm	State	0.09	0.078	0.082	0.084	0	0	0
Maximum 8-hour Concentration	ppm	State	0.070	0.067	0.074	0.068	0	1	0
		Federal	0.070	0.066	0.074	0.068	0	1	0
Nitrogen Dioxide (NO_2) – Chula Vista									
Maximum 1-hour Concentration	ppm	State	0.18	0.052	0.052	0.043	0	0	0
		Federal	0.100	0.053	0.052	0.043	0	0	0
Annual Concentration	ppm	State	0.030	0.009	0.008	0.007	0	0	0
		Federal	0.053	0.010	0.008	0.007	0	0	0
Carbon Monoxide (CO) – El Cajon/San Ysidro[b]									
Maximum 1-hour Concentration	ppm	State	20	1.4	2.7	3.3	0	0	0
		Federal	35	1.4	2.7	3.3	0	0	0
Maximum 8-hour Concentration	ppm	State	9.0	1.1	2.1	2.8	0	0	0
		Federal	9	1.1	2.1	2.8	0	0	0
Sulfur Dioxide (SO_2) – First Street									
Maximum 1-hour Concentration	ppm	Federal	0.075	0.001	0.001	0.001	0	0	0
Maximum 24-hour Concentration	ppm	State	0.04	0.0003	0.0003	0.0004	0	0	0
	ppm	Federal	0.140	0.0003	0.0003	0.0004	0	0	0
Annual Concentration	ppm	Federal	0.030	0.0001	0.0001	0.0001	—	—	—
Coarse Particulate Matter (PM_{10})[a] – Chula Vista									
Maximum 24-hour Concentration	µg/m³	State	50	38	51	57	0	0	0
		Federal	150	38	51	57	0	0	0
Annual Concentration	µg/m³	State	20	—	—	—	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a] – Chula Vista									
Maximum 24-hour Concentration	µg/m³	Federal	35	16.2	25.5	28.8	0	0	0

Table 3.1-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year[c]		
				2022	2023	2024	2022	2023	2024
Annual Concentration	µg/m³	State	12	—	—	—	—	—	—
		Federal	9.0	8.3	8.8	9.9	0	0	0

Sources: CARB 2025b; EPA 2024.
Notes: ppm = parts per million; µg/m3 = micrograms per cubic meter; — = not available.
Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and Environmental Protection Agency AirData (http://www.epa.gov/airdata) represent the highest concentrations experienced over a given year.
Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour O_3, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

[b] The San Ysidro monitoring station is the closest to the project site but data are only available for 2023 and 2024. The El Cajon monitoring station was the closest for 2022.

[c] The exceedances are the number of days the standards were exceeded.

3.1.2.3 Pollutants of Concern

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal government has established ambient air quality standards (criteria) for outdoor concentrations to protect public health. Federal and state standards for these pollutants have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. The six pollutants of concern are O_3, NO_2, CO, SO_2, particulate matter (particulate matter with an aerodynamic diameter less than or equal to 10 microns [PM_{10}] and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns [$PM_{2.5}$]), and lead. These pollutants, as well as toxic air contaminants (TACs), are discussed in detail in Appendix C. California additionally has ambient air quality standards for sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles.

Non-Criteria Air Pollutants

Non-criteria air pollutants include TACs, diesel particulate matter (DPM), odorous compounds, and valley fever. A detailed discussion of these pollutants is located in Appendix C.

3.1.2.4 Sensitive Receptors

Sensitive Receptors

The SDAPCD identifies sensitive receptors as those who are especially susceptible to adverse health effects from exposure to TACs, such as children, the elderly, and the ill. Sensitive receptors include schools (grades kindergarten through 12), day care centers, nursing homes, retirement homes, health clinics, and hospitals within one and a

quarter mile of the facility (SDAPCD 2022a). The San Diego Unified Port District (District) defines sensitive receptors in the Port Master Plan as "areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, noise, and other pollutants. A sensitive receptor includes, but is not limited to, hospitals, schools, daycare facilities, elderly housing, and convalescent facilities, but excludes overnight accommodations" (San Diego Unified Port District 2024).

The sensitive receptors within one and a quarter mile of the proposed project include residences, Kimball Elementary School, National City Middle School, Central Elementary School, John A. Otis Elementary School, Angie's Playhouse Childcare, Kimball Senior Center, and Windsor Gardens Convalescent Center of San Diego.

3.1.2.5 Toxic Air Contaminants

Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute (immediate) and/or chronic (cumulative) non-cancer health effects. A toxic substance released into the air is considered a TAC. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced through either short-term (acute) or long-term (chronic) exposure to a given TAC.

Examples of TACs include certain aromatic and chlorinated hydrocarbons, certain metals, asbestos, and DPM. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills.

3.1.3 Applicable Laws and Regulations

Federal

Criteria Air Pollutants

The federal CAA, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the CAA, including the setting of the NAAQS for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric O_3 protection, and enforcement provisions.

Under the CAA, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The NAAQS describes acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The CAA requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the standards within mandated time frames.

Hazardous Air Pollutants

The 1977 federal CAA amendments required the EPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. Hazardous air pollutants include certain volatile organic compounds (VOCs), pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 CAA amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

State

Criteria Air Pollutants

The federal CAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the CAA and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describes adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, 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. The NAAQS and CAAQS are presented in Table 3.1-3.

Table 3.1-3. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—

Table 3.1-3. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m³	9.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day Average	1.5 µg/m³	—	—
	Calendar Quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24 hours	25 µg/m³	—	—
Visibility-reducing particles	8 hours (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016; EPA 2016.

Notes: O_3 = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m³= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

a California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended 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, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 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 µg/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 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 on a reference temperature of 25 °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 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

f On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

g To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb.

California standards are in units of 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.

[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 national 1-hour standard, the 3-year average of the annual 99th percentile of the one-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 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On February 7, 2024, the national annual $PM_{2.5}$ primary standard was lowered from 12 μg/m³ to 9.0 μg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

[j] 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.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 μg/m³ as a quarterly average) remains in effect until 1 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.

Toxic Air Contaminants

A TAC is defined by California law as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Federal laws use hazardous air pollutants to refer to the same types of compounds that are referred to as TACs under state law. California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588).

AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. Pursuant to AB 2588, existing facilities that emit air pollutants above specified levels are required to (1) prepare a TAC emission inventory plan and report, (2) prepare a risk assessment if TAC emissions were significant, (3) notify the public of significant risk levels, and (4) if health impacts were above specified levels, prepare and implement risk reduction measures.

The following regulatory measures pertain to the reduction of DPM and criteria pollutant emissions from off-road equipment and diesel-fueled vehicles.

Large Spark-Ignition Engine Fleets Regulation (13 CCR 2775)

The CARB Large Spark-Ignition Engine Fleet Requirements Regulation targets emissions reductions from equipment such as forklifts, industrial tow tractors, sweepers/scrubbers, and airport ground support equipment powered by spark-ignition engines of at least 25 horsepower and over 1.0 liter displacement. The regulation mandates that medium and large fleets meet specific Fleet Average Emission Level standards for hydrocarbons and nitrogen oxides, which became progressively stricter between 2009 and 2013. Fleets must report their equipment through CARB's DOORS system within 60 days of becoming subject to the regulation, label each unit with an Equipment Identification Number within 30 days, and maintain records through June 30, 2023.

To comply, fleets can replace older equipment with newer certified engines, retrofit or repower existing units, or incorporate zero-emission equipment like electric forklifts. Exemptions apply to small fleets (three or fewer units), agricultural in-field forklifts used primarily for farming, rental equipment used for 30 or fewer days annually, and military tactical vehicles. Annual attestation of compliance is required, and CARB provides resources and support through its Off-Road Zone and DOORS hotline.

Clean Truck Check Program

The Clean Truck Check Program, developed by CARB under Senate Bill 210, is a comprehensive inspection and maintenance regulation for heavy-duty vehicles operating in California. It applies to nearly all diesel and alternative fuel vehicles over 14,000 pounds gross vehicle weight rating, including those not registered in California. The program began phased implementation in January 2023 and includes periodic emissions testing, roadside emissions monitoring, and expanded enforcement strategies to ensure vehicles maintain properly functioning emissions control systems. Vehicles flagged as high emitters through roadside monitoring receive a Notice to Submit to Testing and must pass an emissions test within 30 days.

To comply, vehicle owners must report their vehicles to CARB's Clean Truck Check Vehicle Inspection System (CTC-VIS) and pay an annual compliance fee, and the vehicles must pass emissions tests. Enforcement includes penalties for non-compliance and holds on DMV registration. Exemptions exist for zero-emission vehicles, military tactical vehicles, emergency vehicles, historical vehicles, and certain new engines certified to the most stringent NO_x standards during the program's initial years. The program is expected to significantly reduce emissions of smog-forming pollutants and toxic air contaminants, helping California meet federal air quality standards and improve public health.

The EPA recently issued a proposal that partially approves and partially disapproves California's Clean Truck Check Program, also known as the Heavy-Duty Inspection and Maintenance (HD I/M) Regulation. While the EPA supports the regulation as it applies to California-registered vehicles, it raised legal and constitutional concerns about its application to out-of-state and international vehicles operating within California.

Heavy-Duty Omnibus Low NO_x Amendments (13 CCR 1956.8, 1971.1, and 1971.5)

The Heavy-Duty Omnibus Low NO_x Amendments by CARB are a landmark regulation aimed at drastically reducing NO_x and PM emissions from medium- and heavy-duty engines starting with the 2024 model year. The regulation lowers NO_x standards by 75% and PM standards by 50% compared to 2010 levels, introduces a new low-load certification cycle, and strengthens durability, warranty, and in-use testing requirements. These changes are essential for California to meet federal air quality standards for O_3 and PM2.5 by 2031. The regulation complements CARB's Advanced Clean Trucks rule by ensuring internal combustion engines emit as little pollution as technologically possible while the state transitions to zero-emission vehicles.

Amendments adopted in 2023 provide manufacturers with flexibility to maintain product availability during the 2024–2026 transition period. These include provisions for "legacy engines" that meet older standards but require offsets through zero-emission credits or community projects, and exemptions for transit agencies under certain conditions. CARB also aligned future standards with EPA's Clean Trucks Plan to harmonize national and state requirements. Despite these flexibilities, the regulation is expected to achieve significant long-term NO_x reductions—estimated at 17.4 tons/day by 2031 and 45.2 tons/day by 2050—making it the single largest NO_x control measure in California's 2016 SIP.

In June 2025, Congress, through the Congressional Review Act, passed resolutions—signed by President Trump—revoking EPA's previously granted CAA waivers that allowed California to enforce its stricter emissions standards for heavy-duty trucks. This action directly impacts CARB's ability to implement the Low NO_x Omnibus Regulation, which had been approved by the EPA and was set to take effect for 2024 model year engines. Disagreeing with Congress' action, California and 10 other states filed suit, and the issue is being litigated.

Advanced Clean Fleets Regulation

The Advanced Clean Fleets Regulation, adopted by CARB and effective as of October 1, 2023, is a cornerstone of California's strategy to transition medium- and heavy-duty vehicle fleets to zero-emission vehicles (ZEVs). The regulation applies to state and local government fleets, high-priority and federal fleets, and drayage trucks operating at ports and intermodal railyards. It requires that fleets begin replacing internal combustion engine vehicles with ZEVs as part of their normal turnover schedules. By 2036, the rule mandates that 100% of new medium- and heavy-duty vehicle sales in California be ZEVs, supporting the state's climate and air quality goals. CARB estimates the Advanced Clean Fleets Regulation will introduce approximately 1.69 million ZEVs into California's fleet by 2050, resulting in $26.5 billion in statewide health benefits and $48 billion in fleet owner savings due to reduced fuel and maintenance costs. The regulation provides flexibility through exemptions and compliance pathways, including provisions for infrastructure delays and vehicle availability. However, the rule has faced legal and political challenges, particularly following federal actions to revoke California's CAA waivers. In January 2025 CARB withdrew its request for a CAA waiver needed to enforce parts of the Advanced Clean Fleets Regulation on private, federal, high-priority, and drayage fleets.

Advanced Clean Trucks (13 CCR 1963)

The Advanced Clean Trucks Regulation, originally adopted in 2020, aims to significantly reduce harmful emissions from medium- and heavy-duty vehicles, improve public health, and help California meet its air quality and climate goals. The regulation requires manufacturers of medium- and heavy-duty trucks to sell an escalating portion of their vehicles sales in California as ZEVs.

The Advanced Clean Trucks Amendments, approved by CARB in May 2025, are designed to maintain the emissions benefits of the original regulation while offering manufacturers greater flexibility in implementation. These amendments respond to stakeholder feedback and include changes such as allowing manufacturers to pool zero-emission vehicle and near-zero-emission vehicle credits across states that have adopted the Advanced Clean Trucks Regulation. They also permit offsetting deficits in the Class 7–8 tractor group with credits from other vehicle classes, adjust the minimum all-electric range requirements for near-zero-emission vehicles in later years, and modify the order in which credits can be retired.

The amendments are part of CARB's broader strategy to support the transition to zero-emission technologies and uphold commitments made in the Clean Truck Partnership—an agreement with major truck manufacturers to comply with California's clean truck regulations regardless of federal challenges. Despite recent federal actions attempting to revoke California's clean air waivers, CARB remains committed to advancing clean transportation.

On June 12, 2025, Congress officially revoked the EPA waiver for the Advanced Clean Trucks Regulation, along with waivers for CARB's Advanced Clean Cars II and Heavy-Duty Omnibus Low NO_x regulations. This action triggered legal challenges from the State of California, which argues that the revocations are unconstitutional and violate the CAA. The legal status of the Advanced Clean Trucks Regulation now hinges on pending court decisions regarding the legitimacy of using the Congressional Review Act to overturn EPA waivers.

Portable Equipment Registration Program (13 CCR 2450 – 2465)

The Portable Equipment Registration Program is a voluntary statewide program administered by CARB that allows owners and operators of portable engines and equipment units—such as generators, air compressors, rock crushers, and wood chippers—to operate throughout California without needing individual permits from local air

districts. This streamlines operations for businesses that frequently move equipment across district boundaries. To qualify, equipment must meet the definition of "portable," meaning it can be moved and does not remain at a single location for more than 12 consecutive months. While registration in the program exempts equipment from air district permitting in most cases, local air districts retain authority to require permits if the equipment is deemed part of a stationary source or if it exceeds certain thresholds.

The Portable Equipment Registration Program also includes specific eligibility criteria for diesel-fueled engines based on horsepower and emission tier levels, with Tier 4 Final engines being the most compliant. The program has implemented a tier phase-out schedule and fleet average emission standards to reduce particulate matter emissions over time. Fees are assessed for new registrations, renewals, and changes in ownership, and CARB issues color-coded placards to identify engine tiers. Recordkeeping and reporting requirements apply, especially for emergency-use and low-use engines. While the Portable Equipment Registration Program simplifies regulatory compliance for mobile operations, coordination with local air districts is still essential for certain projects and locations.

Idling of Commercial Heavy-Duty Trucks (13 CCR 2485)

In July 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to control emissions from idling trucks. The ATCM prohibits idling for more than 5 minutes for all commercial trucks with a gross vehicle weight rating over 10,000 pounds. The ATCM contains an exception that allows trucks to idle while queuing or involved in operational activities.

In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.)

In July 2007, CARB adopted an ATCM for in-use off-road diesel vehicles. This regulation requires that specific fleet average requirements be met for NO_x emissions and for particulate matter emissions. Where average requirements cannot be met, best available control technology requirements apply. The regulation also includes several recordkeeping and reporting requirements.

In response to AB 8 2X, the regulations were revised in July 2009 (effective December 3, 2009) to allow a partial postponement of the compliance schedule in 2011 and 2012 for existing fleets. On December 17, 2010, CARB adopted additional revisions to further delay the deadlines reflecting reductions in diesel emissions because of the poor economy and overestimates of diesel emissions in California. The revisions delayed the first compliance date until no earlier than January 1, 2014, for large fleets, with final compliance by January 1, 2023. The compliance dates for medium fleets were delayed until an initial date of January 1, 2017, and final compliance date of January 1, 2023. The compliance dates for small fleets were delayed until an initial date of January 1, 2019, and a final compliance date of January 1, 2028. Correspondingly, the fleet average targets were made more stringent in future compliance years. The revisions also accelerated the phase-out of older equipment with newer equipment added to existing large and medium fleets over time, requiring the addition of Tier 2 or higher engines starting on March 1, 2011, with some exceptions: Tier 2 or higher engines on January 1, 2013, without exception; and Tier 3 or higher engines on January 1, 2018 (January 1, 2023, for small fleets).

On October 28, 2011 (effective December 14, 2011), the Executive Officer approved amendments to the regulation. The amendments included revisions to the applicability section and additions and revisions to the definition. The initial date for requiring the addition of Tier 2 or higher engines for large and medium fleets, with some exceptions, was revised to January 1, 2012. New provisions also allow for the removal of emission control devices for safety or visibility purposes. The regulation was also amended to combine the particulate matter and

NO_x fleet average targets under one, instead of two, sections. The amended fleet average targets are based on the fleet's NO_x fleet average, and the previous section regarding particulate matter performance requirements was deleted completely. The best available control technology requirements, if a fleet cannot comply with the fleet average requirements, were restructured and clarified. Other amendments to the regulations included minor administrative changes to the regulatory text.

In 2023, CARB finalized amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation, which took effect on October 1, 2023, with enforcement beginning January 1, 2024. These updates include a tier phase-out schedule that prohibits the use of the oldest and highest-emitting engines—Tier 0, 1, and 2—based on fleet size, with Tier 0 engines banned for large fleets starting in 2024. The amendments also expand restrictions on adding vehicles: Tier 3 engines can no longer be added to any fleet, and medium and large fleets are barred from adding Tier 4 interim engines and model year 2006 or older on-road vehicles. Additionally, fleets must now procure and use renewable diesel in all applicable vehicles, with limited exceptions for availability and cold weather. These changes aim to further reduce NO_x and PM emissions and help California meet its air quality goals.

In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025)

On December 12, 2008, CARB adopted an ATCM to reduce NO_x and particulate matter emissions from most in-use on-road diesel trucks and buses with a gross vehicle weight rating greater than 14,000 pounds. The original ATCM regulation required fleets of on-road trucks to limit their NO_x and particulate matter emissions through a combination of exhaust retrofit equipment and new vehicles. The regulation limited particulate matter emissions for most fleets by 2011 and limited NO_x emissions for most fleets by 2013. The regulation did not require any vehicle to be replaced before 2012 and did not require all vehicles in a fleet be replaced.

In December 2009, the CARB Governing Board directed staff to evaluate amendments that would provide additional flexibility for fleets adversely affected by the struggling California economy. On December 17, 2010, CARB revised this ATCM to delay its implementation along with limited relaxation of its requirements. Starting on January 1, 2015, lighter trucks with a gross vehicle weight rating of 14,001 to 26,000 pounds with 20-year-old or older engines need to be replaced with newer trucks (equivalent to 2010 model year emissions standards as defined in the regulation). Trucks with a gross vehicle weight rating greater than 26,000 pounds with 1995 model year or older engines needed to be replaced as of January 1, 2015. Trucks with 1996 to 2006 model year engines must install a Level 3 (85% control) diesel particulate filter starting on January 1, 2012, to January 1, 2014, depending on the model year, and then must be replaced after 8 years. Trucks with 2007 to 2009 model year engines have no requirements until 2023, at which time they must be replaced with engines equivalent to 2010 model year emissions standards, as defined in the regulation. Trucks with 2010 model year engines would meet the final compliance requirements. The ATCM provides a phase-in option under which a fleet operator would equip a percentage of trucks in the fleet with diesel particulate filters, starting at 30% as of January 1, 2012, with 100% by January 1, 2016. Under each option, delayed compliance is granted to fleet operators who have or will comply with requirements before the required deadlines.

On September 19, 2011 (effective December 14, 2011), the Executive Officer approved amendments to the regulations, including revisions to the compliance schedule for vehicles with a gross vehicle weight rating of 26,000 pounds or less to clarify that *all* vehicles must be equipped with engines equivalent to 2010 model year emissions standards by 2023. The amendments included revised and additional credits for fleets that have downsized; implemented early particulate matter retrofits; incorporated hybrid vehicles, alternative-fueled vehicles, and vehicles with heavy-duty pilot ignition engines; and implemented early addition of newer vehicles. The amendments included provisions for additional flexibility, such as for low-usage construction trucks, and revisions to

previous exemptions, delays, and extensions. Other amendments to the regulations included minor administrative changes to the regulatory text, such as recordkeeping and reporting requirements related to other revisions.

California Health and Safety Code Section 41700

Section 41700 of the California Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Local

San Diego Unified Port District

The Port Master Plan is the governing land use document for physical development within the District; however, there are also other District programs that apply to air quality, and the District's Climate Action Plan has co-benefits to air quality. The District developed the Green Port Program to support the goals of the Green Port Policy, which was adopted in 2008. The Green Port Program supports resource conservation, waste reduction, and pollution prevention. The Clean Air Program provides a framework for the District's commitment to reducing air emissions, through which control measures have been implemented to reduce air emissions, building upon regulatory and voluntary efforts.

Maritime Clean Air Strategy

The Maritime Clean Air Strategy (MCAS) is a strategic planning document, adopted by the Board of Port Commissioners (Board) on October 12, 2021, that identifies short-term and long-term goals and objectives intended to facilitate achievement of a clean, sustainable, and modern seaport (San Diego Unified Port District 2021).[1] The MCAS identifies aspirational goals to reduce baseline air emissions from the operation of maritime businesses, that negatively impact air quality, primarily at the District's two marine cargo terminals (Tenth Avenue Marine Terminal and National City Marine Terminal). The goals and objectives of the MCAS specifically target the reduction of DPM emissions from the main sources of emissions from maritime operations: heavy-duty trucks, rail, cargo handling equipment, harbor craft, the District's vehicle fleet and equipment, shipyards (maritime industrial uses) and ocean-going vessels.

Additionally, as the MCAS is a strategic plan, implementation is subject to future Board actions, as well as regular check-ins on a variety of topics, including feasibility of implementation.

The MCAS assumes the following conditions and advancements will be in place in support of the successful deployment of zero-emission technologies at the District and to meet the MCAS' long-term goals:

[1] It should be noted that MCAS was found to be exempt from CEQA review pursuant to CEQA Guidelines Section 15262 (Feasibility and Planning Studies). Section 15262 exempts projects "involving only feasibility or planning studies for possible future actions which the agency, board, or commission has not approved, adopted, or funded." Use of this exemption allows for the avoidance of costly environmental review under CEQA when a study – here, the MCAS – does no more than contain preliminary, non-binding recommendations. Hence, the MCAS is an aspirational plan that does not contain binding requirements.

Capability: The state of technology meets the load, daily mileage, and hours of operations requirements, including cargo movements within the marine cargo terminals, and ZEV Class 8 trucks will be in place for cargo transported to and from the marine cargo terminals.

Infrastructure: ZEVs and equipment. Additionally, it assumes technologies and markets will continue to mature.

Commercial availability: Commercial availability of vehicles and equipment will have increased, particularly with specialized equipment such as electric top handlers and auto carrier trucks.

Education training: There will be an adequate number of trained service personnel to repair and maintain zero-emission equipment and vehicles to ensure that there is no undue disruption of cargo and maritime operations.

While the MCAS focuses on advancing near-term objectives that will help accelerate the deployment of zero- and near-zero-emission technologies, the MCAS envisions that these advancements will be in place to support successful implementation of the MCAS goals and that there will be sufficient contributions from other parties.

In alignment with its Vision Statement, "Health Equity for All," the MCAS is intended to guide future District decision-making and "provide a planning framework for potential future actions that may be implemented to achieve the goals and objectives identified in the MCAS" (San Diego Unified Port District 2021). The MCAS also recognizes that various means may be employed or pursued by the District to reduce emissions (including the adoption of regulatory standards, purchase of equipment, or strategic partnerships). Accordingly, an individual project would not necessarily impede or obstruct achievement of the MCAS' goals or the ability of the District to consider, approve, and implement projects and/or initiatives toward achievement of the MCAS goals and objectives. The MCAS also anticipates that "technological advances will result in additional options for implementation toward achievement of near-term goals and objectives" (San Diego Unified Port District 2021). To that end, the MCAS represents a strategy to be pursued by the District, through a variety of future means, measures, projects, and initiatives.[2]

San Diego County Air Pollution Control District

While CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The proposed project area is located within the SDAB and is subject to the guidelines and regulations of the SDAPCD.

In the County, O_3 and particulate matter are the pollutants of main concern, since exceedances of state ambient air quality standards for those pollutants have been observed in most years. For this reason, the SDAB has been designated as a nonattainment area for the state PM_{10}, $PM_{2.5}$, and O_3 standards. The SDAB is also a federal O_3 attainment (maintenance) area for 1997 8-hour O_3 standard, an O_3 nonattainment area for the 2008 and 2015 8-hour O_3 standards, and a CO maintenance area (western and central part of the SDAB only, including the proposed project area).

Federal Attainment Plans

In October 2020, the SDAPCD adopted an update to the Eight-Hour Ozone Attainment Plan for San Diego County (2015 O_3 NAAQS), which indicated that local controls and state programs would allow the region to reach attainment

[2] The MCAS defines "strategy" as a "generic term that encompasses plans, projects, programs, partnership, and various other efforts and initiatives that will help achieve a goal" (San Diego Unified Port District 2021).

of the federal 8-hour O_3 standard (2008 O_3 NAAQS) by 2026 and 2032 (2015 O_3 NAAQS) (SDAPCD 2020a). In this plan, SDAPCD relies on the Regional Air Quality Strategy (RAQS) to demonstrate how the region will comply with the federal O_3 standard. The RAQS details how the region will manage and reduce O_3 precursors (NO_x and VOCs) by identifying measures and regulations intended to reduce these pollutants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and the EPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS.

Currently, the County is designated as severe nonattainment for the 2008 and 2015 NAAQS and maintenance for the 1997 NAAQS. As documented in the 2020 8-Hour Ozone Attainment Plan for San Diego County, the County has a likely chance of obtaining attainment because of the transition to low-emission cars, stricter new source review rules, and continuance of the requirement of general conformity for military growth and the San Diego International Airport. The County will also continue emission control measures, including ongoing implementation of existing regulations of stationary and area-wide sources that limit emissions of O_3 precursors, subsequent inspections of facilities and sources, and the adoption of laws requiring best available retrofit control technology for control of emissions (SDAPCD 2020a).

State Attainment Plans

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The RAQS for the SDAB was initially adopted in 1991 and is updated triennially, most recently in 2022 (SDAPCD 2022b).

The 2022 RAQS updates the region's plan to meet CAAQS for O_3. As San Diego remains a nonattainment area, the California Clean Air Act requires periodic revisions to RAQS to ensure the implementation of all feasible control measures for reducing emissions of O_3 precursors—namely oxides of nitrogen (NO_x) and VOCs—from stationary sources. The 2022 update builds on previous revisions (1995, 1998, 2001, 2004, 2009, and 2016) and incorporates new feasible control measures based on updated assessments of technology, cost-effectiveness, and emission reduction potential.

This revision ensures continued compliance with the "all feasible measures" mandate and outlines a tentative schedule for future regulatory actions. These potential control measures will be evaluated and, if appropriate, developed into proposed rules for consideration by the SDAPCD Governing Board. The strategy was approved on March 9, 2023, and an EIR was prepared in accordance with the California Environmental Quality Act (CEQA), confirming that the project would not have a significant environmental impact.

As of now, the 2022 RAQS for SDAPCD has not yet been fully approved by the EPA as part of the California SIP. While the EPA maintains a list of approved rules and regulations for SDAPCD, the 2022 RAQS does not appear in the most recent updates to the SIP approval tables.

SDAPCD Rules and Regulations

As stated above, the SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations apply to all sources in the jurisdiction of SDAPCD and would apply to the proposed project.

SDAPCD Regulation II: Permits; Rule 20.2: New Source Review Non-Major Stationary Sources

This rule requires new or modified stationary source units (that are not major stationary sources) with the potential to emit 10 pounds per day or more of VOC, NO_x, SO_x, or PM_{10} to be equipped with best available control technology. For those units with a potential to emit above Air Quality Impact Assessments Trigger Levels, the units must demonstrate that such emissions would not violate or interfere with the attainment of any national air quality standard (SDAPCD 2019).

The proposed project does not propose specific stationary sources. If stationary sources were to be included as part of the proposed project, or at a later date, those sources would be subject to Rule 20.2 and require appropriate operating permits from the SDAPCD. Because the SDAPCD has not adopted specific criteria air pollutant thresholds for CEQA analyses, the thresholds identified in Rule 20.2 are utilized in this analysis as screening level thresholds to evaluate project-level impacts, as discussed in Section 3.1.4.2, Thresholds of Significance.

SDAPCD Regulation IV: Prohibitions; Rule 50: Visible Emissions

This rule prohibits discharge into the atmosphere from any single source of emissions whatsoever of any air contaminant for a period or periods aggregating more than 3 minutes in any period of 60 consecutive minutes that is darker in shade than that designated as Number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 1 on the Ringelmann Chart (SDAPCD 1997).

Construction of the proposed project may result in visible emissions, primarily during earth-disturbing activities, which would be subject to SDAPCD Rule 50. Although visible emissions are less likely to occur during operation of the proposed project, compliance with SDAPCD Rule 50 would be required during both construction and operational phases.

SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance

This rule prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or tend to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1969).

Any criteria air pollutant emissions, TAC emissions, or odors generated during construction or operation of the proposed project would be subject to SDAPCD Rule 51. Violations can be reported to the SDAPCD as air quality complaints by telephone, email, and online form. Complaints are investigated by the SDAPCD as soon as possible.

SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust

This rule regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project area (SDAPCD 2009).

Construction of the proposed project, primarily during earth-disturbing activities, may result in fugitive dust emissions that would be subject to SDAPCD Rule 55. Fugitive dust emissions are not anticipated during operation of the proposed project.

SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: Architectural Coatings

This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2021a).

SDAPCD Regulation XII: Toxic Air Contaminants; Rule 1200: Toxic Air Contaminants - New Source Review

This rule requires new or modified stationary source units with the potential to emit TACs above rule threshold levels to demonstrate that they will not increase the maximum incremental cancer risk above 1 in 1 million at every receptor location, demonstrate that toxics best available control technology will be employed if maximum incremental cancer risk is equal to or less than 10 in 1 million, or demonstrate compliance with the SDAPCD's protocol for those sources with an increase in maximum incremental cancer risk at any receptor location of greater than 10 in 1 million but less than 100 in 1 million (SDAPCD 2025a).

The proposed project does not currently include specific stationary sources that would generate TACs not commonly associated with electric vehicle charging projects. If stationary sources with the potential to emit TACs were to be included as part of the proposed project—or if they were added at a later date—those sources would be subject to SDAPCD Rule 1200 and would be subject to new source review requirements.

SDAPCD Regulation XII: Toxic Air Contaminants; Rule 1210: Toxic Air Contaminant Public Health Risks – Public Notification and Risk Reduction

This rule requires stationary sources to prepare a health risk assessment and to provide written public notice of risks at or above the following levels: maximum incremental cancer risks equal to or greater than 10 in 1 million, cancer burden equal to or greater than 1.0, total acute non-cancer health hazard index equal to or greater than 1.0, or total chronic non-cancer health hazard index equal to or greater than 1.0 (SDAPCD 2025b).

The proposed project does not currently include specific stationary sources that would generate TACs. If stationary sources with the potential to emit TACs were to be included as part of the proposed project—or if they were added at a later date—those sources would be subject to SDAPCD Rule 1210 and could be subject to public notification and risk reduction requirements.

Portside Community Emissions Reduction Plan

The Portside Community Emissions Reduction Plan (CERP) contains detailed information and strategies that are intended to reduce both air pollution emissions and community exposure to air pollution in the Community of Portside Environmental Justice Neighborhoods (Portside Community). The goals in the CERP are aspirational and are intended to guide the community members, businesses, organizations, and government agencies partnering in the implementation of this CERP to support health and environmental justice in the Portside Community. While there might not be a clear path to reach some of these goals, the goals identify the direction in which the community wants to go to achieve emissions reductions beyond regulatory requirements. As technology evolves and data continues to be collected, the goals in the CERP may be adjusted (SDAPCD 2021b). CERP goals include reducing TAC emissions in the community, supporting electric freight truck infrastructure and upgrades, quantifying health risk from Port and non-Port activities, establishing health risk reduction goals, and implementing actions to achieve

those goals (SDAPCD 2021b). The Portside Community's CERP was approved by the SDAPCD Governing Board in July 2021 and approved by CARB's Governing Board in October 2021 (CARB 2021).

San Diego Association of Governments

SANDAG is the regional planning agency for the County and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SANDAG serves as the federally designated metropolitan planning organization for the County. With respect to air quality planning and other regional issues, SANDAG has prepared the 2025 Regional Plan for the San Diego region (SANDAG 2025), which was adopted by the SANDAG Board of Directors on December 12, 2025. The Regional Plan combines the big-picture vision for how the region will grow over the upcoming years with an implementation program to help make that vision a reality. The Regional Plan, including its Sustainable Communities Strategy, is built on an integrated set of public policies, strategies, and investments to maintain, manage, and improve the transportation system so that it meets the diverse needs of the San Diego region through 2050.

The Regional Plan sets the policy context in which SANDAG participates in and responds to the SDAPCD's air quality plans and builds off these plans' processes that are designed to meet health-based criteria pollutant standards in several ways (SANDAG 2025). First, it complements the air quality plans by providing guidance and incentives for public agencies to consider best practices that support technology-based control measures in air quality plans. Second, the Regional Plan emphasizes the need for better coordination of land use planning and transportation planning, which heavily influences the emissions produced from the transportation sectors of the economy. This also minimizes land use conflicts, such as residential development near freeways, industrial areas, or other sources of air pollution.

The 2025 Regional Plan is the latest adopted plan and provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources (SANDAG 2025). The plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies.

The 2025 Regional Plan includes a Sustainable Communities Strategy, as required by California Senate Bill 375 (SB 375), for the San Diego region. This Sustainable Communities Strategy describes coordinated transportation and land use planning that exceeds the state's target for reducing per capita greenhouse gas emissions set by the CARB. The state-mandated target is a 19% reduction—compared with 2005—in per capita greenhouse gas emissions from cars and light-duty trucks by 2035. The 2025 Regional Plan aims to achieves a 19% reduction by 2035.

The 2025 Regional Plan also puts forth a forecasted development pattern driven by regional goals for sustainability, mobility, housing affordability, and economic prosperity (SANDAG 2025). With an estimated cost of $126 billion, the plan aims to expand high-frequency transit service, add 35 new Rapid bus routes, improve rural and on-demand transportation options, and develop a complete network of managed lanes to enhance highway reliability. It also includes programs like the Youth Opportunity Pass and investments in bike and pedestrian infrastructure. The plan emphasizes equity, sustainability, and fiscal responsibility while ensuring eligibility for federal and state funding for major infrastructure projects.

3.1.4 Project Impact Analysis

3.1.4.1 Methodology

Construction

Emissions from the construction phase of the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.29 (CAPCOA 2024). Detailed construction equipment modeling assumptions are provided in Attachment A, CalEEMod Outputs, of Appendix C to this EIR. The construction equipment mix used for estimating the construction emissions of the proposed project is based on CalEEMod default values per construction phase and is shown in Table 3.1-4.

Table 3.1-4. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Average Daily Haul Truck Trips	Equipment Type	Quantity	Max Daily Hours
Trenching	16	16	10	Trencher	1	8
				Tractors/Loaders/Backhoes	1	6
				Roller	1	6
Building Construction	60	60	30	Crane	2	8
				Forklifts	3	7
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	2	6
				Welders	6	8
Paving	30	30	20	Paving Equipment	2	8
				Pavers	2	8
				Rollers	2	8
Architectural Coating	10	10	2	Air Compressors	1	6

Operation

Emissions from the operational phase of the proposed project were estimated using CalEEMod. Operational year 2027 was assumed, as it would be the first full year following completion of proposed construction.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in Appendix C.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gases in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site. Natural gas was assumed to be used within the convenience store.

Mobile Sources

Following the completion of construction activities, the proposed project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of the visitors and employees of the proposed project. At full buildout conditions, 672 daily trips are anticipated, 524 of which are zero-emissions trucks. For emissions modeling, 148 trips per day would be from internal combustion vehicles. CalEEMod default data, including trip length, trip characteristics, and emissions factors were used for the model inputs. Project-related traffic was assumed to include a mixture of vehicles in accordance with the associated use, as modeled within the CalEEMod. Emission factors representing the vehicle mix and emissions for 2027 were used to estimate emissions associated with vehicular sources.

Stationary Sources

The project would need supplemental power in case ample utility power is not available at the start of operation. It is assumed that one 891-horsepower diesel generator would be operated up to 10 hours per day for up to 6 months during the start of operation. The diesel generator would be equipped with a CARB-certified level 3 diesel particulate filter. At the end of the 6-month period, there would be ample power from the combination of the on-site solar power production, the battery energy storage system (BESS), and grid power to support the project. Emissions from the generator were estimated using CalEEMod.

Process Hazard Analysis and Off-Site Consequence Analysis

During normal operations, there would be no toxic air emissions from the project. The BESS would be equipped with (1) monitoring and control systems, (2) fire detection and protection systems, and (3) gas ventilation systems, among others, to prevent, monitor, and/or control any battery cell malfunctions. However, to determine the potential public health impacts, this analysis assumes an unlikely event of multiple safety, cooling, and ventilation system failures that do not control the battery cell malfunction. It is also assumed that the battery cell malfunction continues until the reaction ceases, once stored energy has been expended.

In the event of a battery cell malfunction, it is possible that a thermal runaway event and/or a fire could occur. The proposed project BESS is designed to contain such fires within a single battery module, and if a fire does occur, pollutants could be emitted to the atmosphere. Lithium-ion battery system fires are generally considered Class A (plastics fires, from materials such as the separator) and Class B (flammable liquids, from materials such as the electrolyte) but may also have characteristics of Class C (electrical fires) as well. As such, the pollutants generated are similar to other common residential and commercial fires which result in the emissions of carbon dioxide, carbon monoxide, hydrocarbons, and VOCs such as benzene (New York Department of Health 2024).

To evaluate a potential runaway scenario, it is assumed that the release of pollutants to the atmosphere would occur within a relatively short and concentrated period of time (i.e., 1 hour or less). Emission rates for each pollutant are based on the cell and module-level UL9540A (which tests the BESS for thermal runaway propagation) testing data for the proposed BESS equipment.

Tesla Ltd. (as a surrogate for the battery chemistry used at the Facility) provided information on primary pollutants from a battery combustion malfunction. Detailed emissions calculations are provided in Attachment A in Appendix C of this EIR. The compounds and the associated mass emission rates were determined by proprietary testing performed by Tesla Ltd. as part of the UL9540A testing protocol. Under this test, the Tesla Megapack 2XL used cell model CB5T0. The cells are packaged into modules of 112 cells each. There are 24 modules within each Megapack container.

The thermal runaway emission tests showed that in the event of a single battery cell undergoing thermal runaway, there was propagation to two surrounding cells. No external flaming or flame venting occurred during the UL9540A testing. In addition, the tests showed that when an entire battery system module was intentionally ignited, there was no propagation to surrounding modules. Testing of the module, which includes 112 cells, again showed that when one cell underwent thermal runaway, it propagated to two adjacent cells, for a total of three cells. This analysis, however, assumes that 30 cells would be affected (10 times what the UL9540A testing showed), which therefore represents a worst-case scenario (i.e., a multi-battery cell malfunction).

A dispersion modeling analysis was conducted to assess the health risk impacts of a thermal runaway event on proximate off-site neighboring uses. The dispersion modeling is detailed in Appendix C.

3.1.4.2 Thresholds of Significance

The significance criteria used to evaluate the project's impacts to air quality are based on CEQA Guidelines Appendix G. For the purposes of this project, a potentially significant impact to air quality would occur if the proposed project would:

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.
3. Expose sensitive receptors to substantial pollutant concentrations.
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The District has not developed CEQA thresholds of significance for air quality and health risk. The SDAPCD has also not developed specific thresholds of significance to evaluate construction and operational air quality impacts within CEQA documents; however, SDAPCD's Regulation II, Rules 20.2 and 20.3 (new source review for non-major and major stationary sources, respectively), outline Air Quality Impact Analysis (AQIA) trigger levels for criteria pollutants for new or modified sources, based on emissions levels identified under the New Source Review program (SDAPCD 2020b, 2022a). The County of San Diego established screening level thresholds (SLTs) based on SDAPCD AQIA trigger levels in their 2007 Air Quality guidelines for determining significance. SDAPCD amended Rule 20.2 in 2018 to include a $PM_{2.5}$ AQIA of 67 pounds per day; however, the County recommends a $PM_{2.5}$ SLT of 55 pounds per day based on EPA's "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published in 2005 (County of San Diego 2007), which is also consistent with South Coast Air Quality Management District's Air Quality Significance Thresholds (SCAQMD 2023). The County's $PM_{2.5}$ threshold is lower and thus more conservative, and it is consistent with other CEQA analyses at the District; therefore, it is applied herein. The County also recommends a VOC SLT based on the threshold of significance for VOCs from the South Coast Air Quality Management District for the Coachella Valley. SDAPCD has not established an AQIA trigger level for VOCs. In summary, the County's air quality thresholds, based on SDAPCD guidance, are applied herein to evaluate the significance of the project's criteria air pollutant emissions. The County air quality thresholds shown in Table 3.1-5

were used to determine significance of proposed project-generated construction and operational criteria air pollutant emissions; specifically, the proposed project's potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation (as assessed under the Threshold 2).

Table 3.1-5. San Diego County Air Quality Significance Thresholds

Construction or Operational Emissions	
Pollutant	**Total Emissions (Pounds per Day)**
Respirable Particulate Matter (PM_{10})	100
Fine Particulate Matter ($PM_{2.5}$)	55
Oxides of Nitrogen (NO_x)	250
Oxides of Sulfur (SO_x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75

Sources: County of San Diego 2007.

The air quality section of the CEQA Significance Determination Thresholds recognizes attainment status designations for the SDAB and its nonattainment status for both O_3 and particulate matter. As such, the document recognizes that all new projects should include measures, pursuant to CEQA, to reduce project-related emissions of O_3 precursors and particulate matter to ensure that new development does not contribute to San Diego's nonattainment status for these pollutants. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 requiring the preparation of Air Quality Impact Assessments for permitted stationary sources (SDAPCD 2019). The SDAPCD sets forth quantitative emissions thresholds below which a stationary source would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 3.1-5 are exceeded.

The thresholds listed in Table 3.1-5 represent SLTs that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the SLTs would not cause a significant impact. If emissions of nonattainment pollutants exceed the thresholds shown in Table 3.1-5, the proposed project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

With respect to odors, SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

The SDAPCD document, "Supplemental Guidelines for Submission of Air Toxics 'Hot Spots' Program Health Risk Assessments," provides guidance with which to perform health risk assessments within the SDAB. The current SDAPCD thresholds of significance for TAC emissions from the operations of both permitted and non-permitted sources are combined and are less than 10 in 1 million for cancer and less than 1.0 for the chronic hazard index (SDAPCD 2022a).

As discussed in the Environmental Initial Study Checklist (Appendix A), Thresholds 1 and 4 are not included in the analysis below: the project would not result in significant impacts related to a conflict with or obstruction of the applicable air quality plan (Threshold 1), nor would it result in significant impacts regarding emissions that could

lead to objectionable odors affecting a substantial number of people (Threshold 4). These conclusions are summarized in Section 5.5, Effects Found Not to Be Significant, of this Draft EIR. Therefore, only Thresholds 2 and 3 are discussed in the impact analysis below.

3.1.4.3 Project Impacts and Mitigation Measures

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

Impact Discussion

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions violate any air quality standard or contribute substantially to an existing or projected air quality violation or have a cumulatively significant impact on air quality.

Construction Emissions

Construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (worker vehicle trips). Construction emissions can vary substantially day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions.

Criteria air pollutant emissions associated with construction activities were quantified using CalEEMod. Default values provided by the program were used where detailed proposed project information was not available. A detailed depiction of the construction schedule—including information regarding phasing, equipment used during each phase, haul trucks, vendor trucks, and worker vehicles—is included in Section 3.1.4.1, Methodology.

Development of the proposed project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, asphalt pavement application, and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The proposed project would be subject to SDAPCD Rule 55, Fugitive Dust Control. This rule requires that the proposed project take steps to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) generated during grading and construction activities. To account for dust control measures in the calculations, the proposed project would ensure that active sites be watered at least two times daily as a condition of approval.

Exhaust from internal combustion engines used by construction equipment and vehicles would result in emissions of VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. The application of asphalt pavement and architectural coatings would also produce VOC emissions.

Table 3.1-6 shows the estimated maximum daily construction emissions associated with construction of the proposed project. Complete details of the emissions calculations are provided in Attachment A of Appendix C of this EIR.

Table 3.1-6. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per day					
Summer						
2026	3.05	28.54	32.02	0.08	2.45	1.28
2027	4.60	11.01	14.04	0.03	1.36	0.59
Winter						
2026	3.63	34.68	39.10	0.10	3.37	1.60
2027	4.60	33.41	38.72	0.10	3.28	1.51
Maximum	**4.60**	**34.68**	**39.10**	**0.10**	**3.37**	**1.60**
County Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; CalEEMod = California Emissions Estimator Model.
See Appendix C for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. Although not considered mitigation, these emissions reflect the CalEEMod "mitigated" output, which accounts for the required compliance with SDAPCD Rule 55 (Fugitive Dust) and Rule 67.0.1 (Architectural Coatings).

As shown in Table 3.1-6, daily construction emissions would not exceed the significance thresholds for any criteria air pollutant. Therefore, impacts during construction would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Impacts would be **less than significant.**

Operational Emissions

Operation of the proposed project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources (vehicle trips), area sources (consumer products and landscape maintenance equipment), and energy sources. As discussed in Section 3.1.4.1, Methodology, pollutant emissions associated with long-term operations were quantified using CalEEMod. Project-generated mobile source emissions were estimated in CalEEMod based on project-specific trip rates. CalEEMod default values were used to estimate emissions from the proposed project area and energy sources.

Table 3.1-7 presents the maximum daily area, energy, and mobile source emissions associated with operation (Year 2027) of the proposed project without mitigation. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Attachment A of Appendix C.

Table 3.1-7. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per day					
Summer						
Area	0.21	<0.01	0.26	<0.01	<0.01	<0.01
Energy	<0.01	0.02	0.02	<0.01	<0.01	<0.01

Table 3.1-7. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per day					
Mobile	0.55	0.35	3.65	0.01	0.78	0.20
Stationary	14.62	65.39	37.28	0.07	0.29	0.29
Summer Total	**15.38**	**65.76**	**41.21**	**0.08**	**1.06**	**0.49**
Winter						
Area	0.17	—	—	—	—	—
Energy	<0.01	0.02	0.02	<0.01	<0.01	<0.01
Mobile	0.54	0.38	3.48	0.01	0.78	0.20
Stationary	14.62	65.39	37.28	0.07	0.29	0.29
Winter Total	**15.33**	**65.79**	**40.78**	**0.08**	**1.06**	**0.49**
County Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; CalEEMod = California Emissions Estimator Model; <0.01 = reported value is less than 0.01.
See Appendix C for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect the CalEEMod "mitigated" output, which accounts for compliance with SDAPCD Rule 67.0.1 (Architectural Coatings).

As shown in Table 3.1-7, the combined daily area, energy, and mobile source emissions would not exceed the SDAPCD's operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Impacts during operation would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Impacts would be **less than significant**.

Level of Significance Prior to Mitigation

Impacts would be **less than significant.**

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be **less than significant.**

Threshold 3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact Discussion

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed "sensitive receptors" are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups

and the activities involved. As defined and discussed in Section 3.1.2, Existing Conditions, there are sensitive receptors within 2 kilometers of the project site.

Toxic Air Contaminants

Project construction would result in emissions of DPM from heavy construction equipment and trucks accessing the site. DPM is characterized as a TAC by the State of California. The Office of Environmental Health Hazard Assessment has identified carcinogenic and chronic noncarcinogenic effects from long-term exposure but has not identified health effects due to short-term exposure to diesel exhaust. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, the duration of the proposed construction activities would only constitute a small percentage of the total 30-year exposure period. Due to this relatively short period of exposure (10 months) and minimal particulate emissions on-site, TACs generated by the project would not result in concentrations causing significant health risks. The closest sensitive receptor is over 1,300 feet to the east of the project site (residences). Overall, the project would not result in substantial TAC exposure to sensitive receptors in the vicinity of the project, and impacts would be **less than significant**.

Additionally, the health risk public notification thresholds adopted by the SDAPCD Governing Board is 10 excess cancer cases in a million for cancer risk and a hazard index of more than one (1.0) for non-cancer risk. The hazard index of more than 1.0 means that predicted levels of a toxic pollutant are greater than the reference exposure level, which is considered the level below which adverse health effects are not expected. Examples of projects that emit toxic pollutants over long-term operations include oil and gas processing, gasoline dispensing, dry cleaning, electronic and parts manufacturing, medical equipment sterilization, freeways, and rail yards (SCAQMD 1993). As an electric truck hub, the project would not emit substantial amounts of TACs during operations, and sensitive receptors are not proximate to the project site; as such, a formal health risk assessment will not be required for the project. Accordingly, the project is not anticipated to result in emissions that would exceed the SDAPCD Governing Board-adopted health risk notification thresholds.

While the project would not result in regular emission of TACs during operation, as discussed in Section 3.1.4.1, Methodology, TACs may be emitted during a thermal runaway event. A hazardous consequence analysis was prepared to evaluate potential acute health impacts from TAC emissions from a thermal runaway event from 30 cells (10 times what the UL9540A testing showed) at proximate receptors. The results of this analysis, as presented in Table 3.1-8, show that the acute hazard index at the point of maximum impact would be below the threshold of 1.0. As such, impacts would be **less than significant**.

Table 3.1-8. Hazardous Consequence Analysis Results

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Acute Hazard Index – Point of Maximum Impact	Index Value	0.1	1.0	Less than Significant

Source: See Attachment B of Appendix C.

Health Impacts of Carbon Monoxide

Mobile source impacts occur on two basic scales of motion. Regionally, project-related travel would add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SDAB. Locally, project-

related traffic would be added to the City's roadway system. If such traffic occurs during periods of poor atmospheric ventilation, consists of a large number of vehicles "cold-started" and operated at pollution-inefficient speeds, and takes place on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO "hotspots" in the area immediately around points of congested traffic. Because of continued improvement in mobile emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing.

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. As discussed in Section 3.1.4.1, Methodology, the project would result in up to 148 daily one-way trips from internal combustion vehicles. The majority of the traffic coming to and from the project site would be battery-electric trucks that do not emit CO. Therefore, a CO hotspot analysis is not needed, and the proposed project would have a **less-than-significant** impact.

Health Impacts of Other Criteria Air Pollutants

Construction and operation of the proposed project would not result in emissions that exceed the SDAPCD's emission thresholds for any criteria air pollutants. Regarding VOCs, some VOCs are associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would not result in the exceedances of the SDAPCD's thresholds. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, SDAPCD Rule 67.0.1 restricts the VOC content of coatings for both construction and operational applications.

In addition, VOCs and NO_x are precursors to O_3, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS (the SDAB is designated by the EPA as an attainment area for the 1-hour O_3 NAAQS standard and the 1997 8-hour NAAQS standard). The health effects associated with O_3 are generally associated with reduced lung function. The contributions of VOCs and NO_x to regional ambient O_3 concentrations are the result of complex photochemistry. The increases in O_3 concentrations in the SDAB due to O_3 precursor emissions tend to be found downwind from the source location, as the travel allows time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O_3 ambient air quality standards tend to occur between April and October when solar radiation is highest.

According to the construction emissions analysis, construction of the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. Health impacts from exposure to NO_2 and NO_x are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, these operations would be relatively short term. Additionally, off-road construction equipment would operate at various portions of the site and would not be concentrated in one portion of the site at any one time. Construction of the proposed project would not require any stationary emission sources that would create substantial, localized NO_x impacts, as shown in Table 3.1-6. Therefore, health impacts from NO_x emissions on sensitive receptors would be considered **less than significant**.

The VOC and NO_x emissions, as described previously, would minimally contribute to regional O_3 concentrations and its associated health effects. In addition to O_3, NO_x emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO_2. As shown in Table 3.1-2, the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected that the proposed project's operational NO_x emissions would result in exceedances of the NO_2 standards or contribute to the associated health effects. CO emissions tend to have a localized impact associated with congested intersections. The associated CO "hotspots" were discussed previously as a less-than-significant impact. Thus, the proposed project's CO emissions would not contribute to

significant health effects associated with this pollutant. Likewise, PM_{10} and $PM_{2.5}$ would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter, would not obstruct the SDAB from realizing attainment for these pollutants, and would not contribute to significant health effects associated with particulates.

Based on the preceding considerations, health impacts associated with criteria air pollutants would be **less than significant**, and the proposed project would not expose sensitive receptors to substantial pollutant concentrations during construction or operation.

Level of Significance Prior to Mitigation

Impacts would be **less than significant.**

Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Impacts would be **less than significant.**

3.2 Energy

3.2.1 Overview

This section is based on the Air Quality, Greenhouse Gas, and Energy Technical Report (Appendix C to this Draft Environmental Impact Report [EIR]) and describes the existing energy conditions of the proposed Tidelands Avenue Electric Truck Hub Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

3.2.2 Existing Conditions

Electricity

According to the U.S. Energy Information Administration, California used approximately 239,480 gigawatt-hours of electricity in 2023 (EIA 2024a). Electricity usage in California for different land uses varies substantially based on the types of uses in a building, the types of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Because of the state's numerous energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita in the residential sector is second only to Hawai'i when compared to other states (EIA 2024b).

San Diego Gas & Electric Company (SDG&E) provides electrical and natural gas service to the region. SDG&E is a regulated public utility that provides energy service to 3.7 million people through 1.5 million electric meters and 900,000 natural gas meters in San Diego County and southern Orange County. The SDG&E service area spans 4,100 square miles. SDG&E and other utilities in the state are regulated by the California Public Utilities Commission (CPUC) (SDG&E 2024). According to the California Energy Commission (CEC), approximately 78 billion kilowatt-hours (kWh) of electricity were used in SDG&E's service area in 2019 (CEC 2024a). The project would connect to and be served by SDG&E electrical infrastructure but would receive power from San Diego Community Power.

Natural Gas

According to the U.S. Energy Information Administration, California used approximately 2,139.3 trillion British thermal units of natural gas in 2022 (EIA 2024b). Natural gas is used for cooking, space heating, and generating electricity, and as an alternative transportation fuel. In 2022, by sector, industrial uses utilized 33% of the state's natural gas, followed by 31% from electric power generation, 21% from residential, 12% from commercial, and 2% from transportation uses (EIA 2022a).

The CPUC regulates California's natural gas rates and natural gas services, including in-state transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. Biogas (e.g., from wastewater treatment facilities or dairy farms) is just beginning to be delivered into the gas utility pipeline systems, and the state has been encouraging its development (CPUC 2022).

In 2019, SDG&E delivered approximately 4.9 billion therms of natural gas to the region, with 3 billion therms for nonresidential use and 1.9 billion therms for residential use (CEC 2023). The project would connect to and be served by SDG&E natural gas infrastructure.

Petroleum

According to the U.S. Energy Information Administration, California used approximately 628 million barrels of petroleum in 2022, with the majority (534 million barrels) used for the transportation sector (EIA 2022b). There are 42 U.S. gallons in a barrel, so this equates to a total daily use of approximately 60 million gallons of petroleum among all sectors and 50 million gallons for the transportation sector.

Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. California has implemented numerous regulations and policies to improve vehicle efficiency and to support the use of alternative transportation. As such, the CEC anticipates an overall decrease of gasoline demand in the state over the next decade (CEC 2024b).

3.2.3 Applicable Laws and Regulations

Federal

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards, including fuel economy standards for various vehicle classifications. Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and lighting efficiency standards (Sections 301–325)
- Building energy efficiency (Sections 411–441)

The EISA's RFS requires ever-increasing levels of renewable fuels to replace petroleum. The U.S. Environmental Protection Agency is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with fuel refiners, renewable fuel producers, and many other participants.

The RFS program originally was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under that act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that laid the foundation for achieving significant reductions of greenhouse gas (GHG) emissions through the use of renewable fuels, for reducing imported petroleum, and for encouraging the development and expansion of our nation's renewable fuels sector. The updated program (RFS2) includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.

- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the U.S. Environmental Protection Agency to apply life cycle GHG performance threshold standards to ensure that each category of renewable fuel emits less GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."

State

California Environmental Quality Act

To ensure that energy implications are considered by lead agencies as part of the California Environmental Quality Act (CEQA) process, EIRs must include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the CEQA Guidelines provides a list of energy-related topics that should be analyzed in an EIR. Although it does not describe significance thresholds for determining the significance of impacts related to energy, Appendix F provides the following topics that the lead agency may consider in the energy analysis of an EIR, where topics are applicable or relevant to the project:

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

Warren—Alquist Act

The California legislature passed the Warren–Alquist Act in 1974, which created the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for both buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to the more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as nonconventional energy sources.

Senate Bill 1368

On September 29, 2006, Governor Arnold Schwarzenegger signed into law Senate Bill (SB) 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation (minimum level of demand on an electrical grid over a span of time) by the state's utilities to those power plants that meet an emissions performance standard jointly established by the CEC and the California Public Utilities Commission.

The CEC has designed regulations with the following goals (Perata, Chapter 598, Statutes of 2006):

- Establish a standard for baseload generation owned by, or under long-term contract to, publicly owned utilities of 1,100 pounds of carbon dioxide (CO_2) per megawatt-hour to encourage the development of power plants that meet California's growing energy needs while minimizing their GHG emissions
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the CEC website to facilitate public awareness of utility efforts to meet customer needs for energy over the long-term while meeting the state's standards for environmental impact
- Establish a public process for determining the compliance of proposed investments with the emissions performance standard.

Assembly Bill 1007

Assembly Bill (AB) 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Other Energy Regulations

The following state executive orders, statutes, and regulations achieve energy reduction co-benefits: AB 32 and SB 32; California Building Standards (California Code of Regulations [CCR], Title 20 and Title 24, Parts 6 and 11); AB 1493 ("Pavley" regulations); Executive Order (EO) S-1-07; SB 375; CARB Truck and Bus Regulation; CARB On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation; CARB Advanced Clean Car and Trucks Program; EO B-16-12; SB 350; and SB 100 (refer to Section 3.2.2 in Appendix C for detailed descriptions).

Local

San Diego Association of Governments

The Regional Energy Strategy establishes goals for the San Diego region to be more energy efficient, increase the use of renewable energy sources, and enhance the region's energy infrastructure in order to meet the growing energy demand. The Regional Energy Strategy serves as an energy policy guide to support decision-making by the San Diego Association of Governments and its member agencies as the region strives to meet the energy needs of a growing population, housing stock, and workforce while maintaining and enhancing regional quality of life and economic stability.

SDG&E Long-Term Procurement Plan

As required by the CPUC, utility companies such as SDG&E must prepare Long-Term Procurement Plans to ensure that adequate energy supplies are available to maintain a reserve margin of 15% above the estimated energy demand. These plans outline future energy needs and how those needs can be met. In December 2006, SDG&E filed its Long-Term Procurement Plan with the CPUC, which included a 10-year energy resource plan that details its expected portfolio of energy resources over the period of 2007 through 2016. The projections included in the current Long-Term Procurement Plan were based on the CEC's California Energy Demand 2008–2018 Forecast, dated November 2007. The 2016–2026 CEC California Energy Demand projections are now lower than what was anticipated in 2007.

San Diego Unified Port District Climate Action Plan, Green Port Program, and Maritime Clean Air Strategy

The San Diego Unified Port District's Climate Action Plan, Green Port Program, and Maritime Clean Air Strategy have measures that reduce GHG emissions and may also reduce energy usage. These are discussed in more detail in Section 3.2.3.2 in Appendix C.

3.2.4 Project Impact Analysis

3.2.4.1 Methodology

Petroleum

Potential impacts related to the proposed project's consumption of petroleum (transportation fuels) were assessed through consideration of the projected traffic trip generation during construction and operation, as detailed in the California Emissions Estimator Model (CalEEMod) outputs that were prepared for the project (see Attachment A of Appendix C).

Electricity and Natural Gas

The estimation of operational electricity and natural gas consumption was based on the CalEEMod land use defaults and units or total area (i.e., square footage) of the proposed project's land uses. The convenience store would use natural gas for heating.

Notably, the methodology used to evaluate the project's consumption of electricity and natural gas does not account for the existing consumption of the parking lot that currently exists at the project site. This is a conservative approach that serves to overestimate the project's consumption of electricity and natural gas, as it utilizes a baseline of zero consumption in lieu of reporting an incremental change in consumption from the non-zero baseline that is part of the existing condition.

Per CEQA Guidelines Appendix F, this analysis quantifies the project's electricity and natural gas consumption; evaluates the associated impacts on energy resources and requirements, peak and base period demand, and effects on the local and regional energy supplies; and analyzes the project's compliance with existing energy standards.

3.2.4.2 Thresholds of Significance

The significance criteria used to evaluate the project's impacts to energy are based on CEQA Guidelines Appendix G. For the purposes of this project, a potentially significant impact to energy would occur if the proposed project would:

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

As discussed in the Environmental Initial Study Checklist (Appendix A), Threshold 2 is not included in the analysis below, as the project would not result in significant impacts related to a conflict with or obstruction of a state or local plan for renewable energy or energy efficiency (Threshold 2). These conclusions are summarized in Section 5.5, Effects Found Not to Be Significant, of this Draft EIR. Therefore, only Threshold 1 is discussed in the impact analysis below.

3.2.4.3 Project Impacts and Mitigation Measures

Threshold 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?

Implementation of the project would increase the demand for electricity, gasoline, and diesel consumption in the project area during construction and operation, which are evaluated below.

Construction Use

Electricity

Temporary electric power for lighting and electronic equipment, such as computers, may be needed inside temporary construction trailers. Therefore, the focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the project. The 2022 National Construction Estimator identifies a typical power cost per 1,000 square feet of construction land area per month of $2.41, which was used to calculate the project's total construction power cost (Pray 2022).

Based on the methodology provided in Section 3.1, Air Quality, construction activities are anticipated to occur over 10 months. Each phase is broken down into the schedule proposed for construction. As detailed in Table 3.2-1, the total electrical cost of the on-site electricity usage during the construction of the project is estimated to be approximately $4,855 in 2022 dollars.

Table 3.2-1. Construction Power Cost

Land Use	Power Cost (per 1,000 square feet of construction per month)	Size (1,000 square feet)	Construction Duration (months)	Project Construction Power Cost
Parking Lot	$2.41	196.456	10	$4,734.59
Convenience Market	$2.41	5.0	10	$120.50
			Construction Power Cost in 2022 Dollars	**$4,855.09**

Source: Pray 2022.

SDG&E's general service rate schedule was then used to determine the project's electrical usage during the construction phase. As of January 1, 2022, SDG&E's general service rate is $0.13 per kWh of electricity for industrial services (SDG&E 2022). By dividing the cost in Table 3.2-1 by the SDG&E rate, the total electricity usage from on-site project construction-related activities is estimated to be approximately 37,347 kWh (Table 3.2-2).

Table 3.2-2. Construction Electricity Usage

Project Component and Land Use	Cost per kWh	Project Construction Power Cost	Project Construction Electricity Usage (kWh)
Parking Lot	$0.13	$4,734.59	36,420
Convenience Market	$0.13	$120.50	927
		Total Construction Electricity Usage (kWh)	**37,347**

Source: SDG&E 2022.
Note: kWh = kilowatt-hour.

Natural Gas

Natural gas is not anticipated to be required during the project's construction phase because construction activities for new buildings and facilities do not typically utilize natural gas. Nonetheless, any use of natural gas during construction would be sufficiently served by existing supply from SDG&E and would not require additional local or regional capacity. Any minor amounts of natural gas that may be consumed because of construction would be temporary and negligible and would not have an adverse effect.

Petroleum

Heavy-duty equipment associated with construction during development of the project would rely on diesel fuel, as would vendor trucks involved in the delivery of materials and haul trucks responsible for importing or exporting materials. Construction workers would travel to and from the project area throughout the duration of construction. Attachment A in Appendix C lists the assumed equipment usage and vehicle trips.

As previously discussed, fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. The estimated diesel fuel usage from construction equipment, haul trucks, and vendor trucks, as well as estimated gasoline fuel usage from worker vehicles, is shown in Table 3.2-3.

Table 3.2-3. Total Project Construction Petroleum Demand

Year	Off-Road Equipment (diesel)	Haul Trucks (diesel)	Vendor Trucks (diesel)	Worker Vehicles (gasoline)
	Gallons			
2026	22,654.26	12,349.66	8,284.04	3,472.67
2027	10,278.16	7,513.22	4,491.67	1,891.80
Total	**32,932.42**	**19,862.88**	**12,775.71**	**5,364.46**

Note: See Attachment A in Appendix C for outputs.

In summary, construction activities associated with the project would consume approximately 5,365 gallons of gasoline from worker vehicles and approximately 65,571 gallons of diesel for off-road equipment, haul trucks, and

vendor trucks. In San Diego County, it is estimated that approximately 15.7 million gallons of petroleum would be consumed in 2026 from off-road equipment and 1.2 billion gallons from on-road vehicles (CARB 2025).

The project would be subject to CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index is less than or equal to the calculated fleet average target rate or that the fleet has met the Best Achievable Control Technology requirements. Key 2022 amendments include a tier phase-out schedule that bans the use of older, higher-emitting engines (Tiers 0, 1, and 2) based on fleet size, and restricts the addition of Tier 3 and Tier 4 interim engines to fleets. Fleets must now procure and use renewable diesel, with limited exceptions, and maintain documentation of fuel purchases.

Overall, the project would not be unusual when compared to overall local and regional demand for construction-related energy resources and would not require equipment that would be less energy efficient than equipment at comparable construction sites in the region or state.

Considering these factors, the project would not result in the inefficient, wasteful, or unnecessary consumption of construction energy. Therefore, construction impacts associated with the consumption of electricity, natural gas, and petroleum would be **less than significant**, and no mitigation is required.

Operational Use

Electricity

Project operation would require electricity for multiple purposes including, but not limited to, building heating and cooling, water heating, lighting, appliances, and electronics. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage.

The increase in electricity demand for the future potential buildout of the project is presented in Table 3.2-4. As shown in Table 3.2-4, the project is estimated to have a total electrical consumption of approximately 2,859,963 kWh per year.

Table 3.2-4. Project Annual Operational Electricity Consumption Summary

Land Use	Electricity Demand (kWh per year)
Convenience Market	153,429
Battery Energy Storage System Auxiliary Load	691,211
Electric Vehicle Charging Losses	1,843,228
Parking Lot Lighting	172,095
Total Project Electricity Consumption	**2,859,963**

Notes: kWh = kilowatt-hour.
See Attachment A in Appendix C for detailed results.

In 2022, the nonresidential electricity consumption within San Diego County was 12,802,545,160 kWh (12,802 gigawatt-hours) (CEC 2024a). For context, therefore, the proposed project's electricity demand would represent an

approximate 0.02% increase in San Diego County's annual nonresidential electricity use (excluding any offset realized by the PV canopies). As previously discussed, the project would include a 1,703-kilowatt solar PV system on site that is estimated to produce 2,902,255 kWh per year, thereby offsetting the demand for the project.

Title 24 of the CCR serves to enhance and regulate California's building standards. The most recently adopted amendments to CCR Title 24, Part 6, referred to as the 2025 standards, which became effective on January 1, 2026. Compliance with the applicable CCR Title 24 standards, which is legally required, would further ensure that the proposed project's energy demands would not be inefficient, wasteful, or otherwise unnecessary.

Under peak conditions, the project would have an average peak demand of 0.3 megawatts on the SDG&E grid. In comparison to the SDG&E power grid base peak load of 4,700 megawatts for 2027, the project would represent approximately 0.01% of the SDG&E base peak load conditions. Therefore, the project would represent a minimal increase in the SDG&E grid base peak load.

In summary, the impacts related to electrical supply and infrastructure capacity and the project's effect on peak and base period demands would be **less than significant**.

Natural Gas

Operation of the project would use natural gas for water and space heating. Natural gas consumption associated with operation is based on the CalEEMod outputs presented in Attachment A in Appendix C.

Table 3.2-5 shows the estimated natural gas consumption from the proposed project.

Table 3.2-5. Project Annual Operational Natural Gas Consumption Summary

Land Use	Natural Gas Demand (kBTU per year)
Convenience Market	91,059

Source: Attachment A in Appendix C.
Note: kBTU = thousand British thermal units.

As shown in Table 3.2-5, the increase in natural gas consumption from the proposed project is estimated to be 91,059 thousand British thermal units per year. In comparison, the natural gas consumption in 2022 was 52,230,924,400 thousand British thermal units for San Diego County (CEC 2024c).

According to SDG&E data, natural gas demand is estimated to be 83 billion cubic feet per year in 2025. Based on the project's estimated natural gas consumption as shown in Table 3.2-5 the project would account for approximately 0.0001% of SDG&E's 2025 demand. Therefore, it is anticipated that SDG&E's existing and planned natural gas supplies would be sufficient to support the project's demand for natural gas.

Based on the above, the project would not have a significant effect on local and regional natural gas supplies or require additional capacity. Therefore, impacts related to natural gas would be **less than significant**.

Petroleum

During operations, the majority of fuel consumption resulting from the project would involve the use of motor vehicles traveling to and from the project site, as well as the use of alternative modes of transportation by residents. Petroleum fuel consumption associated with motor vehicles traveling to and from the project site is a function of

the vehicle miles traveled (VMT) as a result of project operation. As shown in Attachment A in Appendix C, the annual VMT attributable to the proposed project is expected to be 178,356 VMT. Countywide, the annual VMT is estimated to be 23,890,082,258 per year in 2025 (CARB 2025).

Similar to the construction analysis above, fuel consumption is estimated by converting the total CO_2 emissions from operation of the project to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Based on the annual fleet mix provided in CalEEMod, 80.4% of the fleet range (from light-duty to medium-duty vehicles and motorcycles) are assumed to be fueled by gasoline. The remaining 19.6% of vehicles (medium-heavy duty to heavy-duty vehicles and buses) are assumed to run on diesel. The gasoline consumption also includes fuel used for landscaping equipment. The diesel consumption also includes the generator for the first 6 months of operation. Calculations for annual mobile source fuel consumption are provided in Table 3.2-6.

Table 3-2.6. Annual Petroleum Demand

Fuel	Vehicle MT CO_2[a]	kg CO_2/Gallon[b]	Gallons
Gasoline	52.26	8.78	5,952.52
Diesel	453.82	10.21	44,449.02
		Total	**50,401.54**

Sources:
[a] Attachment A in Appendix C.
[b] The Climate Registry 2023.
Notes: MT = metric tons; CO_2 = carbon dioxide; kg = kilogram.

As shown in Table 3.2-6, the project would result in a net increase in petroleum usage of 50,402 gallons per year in the first year of operation. For subsequent years when the generator is not used, total petroleum consumption would be 7,201 gallons per year. By comparison, California as a whole consumes approximately 26.4 billion gallons of petroleum per year (EIA 2024b). Countywide total petroleum use by on-road vehicles is expected to be 1.2 billion gallons per year by 2025 (CARB 2025).

With respect to operational transportation-related fuel usage and in relation to CEQA Guidelines Appendix F, enhanced fuel economies realized pursuant to federal and state regulatory actions and the related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, and hydrogen cells) would likely decrease future petroleum fuel demands per VMT.

Based on the above, the project's operational consumption of petroleum would be **less than significant**

Level of Significance Prior to Mitigation

The project would result in **less-than-significant** impacts.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

The project would result in **less-than-significant** impacts.

3.3 Hazards and Hazardous Materials

3.3.1 Overview

This section describes the existing hazardous materials conditions of the Tidelands Avenue Electric Truck Hub Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

Information on hazards and hazardous materials in this section is summarized from the following reports:

- Phase I Environmental Site Assessment (ASTM E 1527-21) Tidelands 1640 Tidelands Avenue National City, California 91950 (Phase I ESA) (Appendix D1)
- Environmental Soil Screening Evaluation, EV Truck Stop, Port of San Diego, 1640 Tidelands Avenue, National City, California (Soil Evaluation) (Appendix D2)
- Peer Review of Phase I Environmental Site Assessment and Environmental Soil Screening Evaluation, EV, Truck Stop, 1640 Tidelands Avenue, National City, California (Phase I ESA Peer Review) (Appendix D3)
- Tidelands Avenue Truck Hub Hazard Mitigation Analysis (HMA) (Appendix D4)
- Tidelands Avenue Truck Hub Emergency Response Plan (ERP) and Addendum (Appendix D5)
- Tidelands Avenue Electric Truck Hub Peer Review – HMA, ERP and Hazards and Hazardous Materials (HMA/ERP Peer Review) (Appendix D6)
- Air Quality, Greenhouse Gas, and Energy Technical Report (Appendix C)

3.3.2 Existing Conditions

3.3.2.1 Historical Activities

Historical records reviewed as part of the Phase I ESA included aerial photographs, topographic maps, and city directories. This information was verified during this analysis with online historical aerials and topographic maps (Appendix D1). As early as 1904, the project site was tidal land on the coast of the San Diego Bay, along the western side of National City. A railroad may have passed through the eastern portion of the project site. The project site was filled and developed as part of the San Diego Naval Station in the 1950s; the exact operations on the project site are not specified in the Phase I ESA, but several buildings and a paved storage yard are observed, and a rail line adjoins the project site to the east. The warehouse-style buildings, adjoining rail line, and outdoor storage are observed through the early 2000s, when buildings were removed and the entire project site was paved and used as a parking lot. Project site use has continued as parking lot until present day.

3.3.2.2 Surrounding Land Uses and Activities

The current uses of the adjoining properties are as follows:

- **North:** Remainder of parent parcel followed by Granger SERV Mart building materials
- **East:** Tidelands Avenue, Sweet Dreams Auto Styling, U.S. Joiner, and Costco Optical Lab
- **South:** Paved parking lot
- **West:** Naval Base San Diego

3.3.2.3 Hazardous Materials Database Review

The Phase I ESA provides a summary of database findings for the project site, as well as adjoining and surrounding properties. The following summarizes the findings of the updated regulatory database search, completed in October 2025.

Cortese List Databases

Government Code Section 65962.5 requires the California Environmental Protection Agency to compile a list of hazardous waste and substances sites (Cortese List). 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 Department of Toxic Substances Control EnviroStor database (California Health and Safety Code Sections 25220, 25242, 25356, and 116395).
2. List of Leaking Underground Storage Tank (LUST) Sites by County and Fiscal Year from the State Water Resources Control Board GeoTracker database (California Health and Safety Code Section 25295).
3. List of solid waste disposal sites identified by the State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit (California Water Code Section 13273[e] and 14 CCR 18051).
4. List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from the State Water Resources Control Board (California Water Code Sections 13301 and 13304).
5. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the California Health and Safety Code, identified by the Department of Toxic Substances Control.

A search was completed of the above-described databases that provide information on Cortese List sites. The project site was not identified on any Cortese List databases. Adjoining Cortese List sites include two leaking underground storage tank cases to the north (Port of San Diego, 1440 Tidelands Avenue, and San Diego Unified Port District #1, 1400 Tidelands Avenue), one leaking underground storage tank case to the south (Nassco Tidelands Storage #1, 1902 Tidelands Avenue). Each of the adjoining sites has received regulatory closure, indicating the release no longer represents a threat to human health or the environment. Closure documents for two of the sites indicate remaining contamination, if any, is limited to soil at the release site and groundwater impacts did not remain (County of San Diego 1998; SWRCB 2025). Groundwater impacts were identified at the third leaking underground storage tank release site, Port of San Diego at 1440 Tidelands Avenue, but were allowed to remain due to the fact that there is no beneficial use of groundwater in the area and the site's location compared to the San Diego Bay (County of San Diego 1996). Groundwater gradient in the area is relatively flat (Arcadis 2025) and is likely tidally influenced.

Based on the findings herein, the project site is not on a Cortese List site. Groundwater impacts may be present, as further discussed in the "Non-Cortese List Hazardous Materials Site" section below.

Non-Cortese List Hazardous Materials Sites

Dudek also reviewed other online databases that provide environmental information on release and cleanup cases in the State of California. While these databases are not included in the Cortese List, they may provide additional information regarding potential environmental contamination on the project site. Table 3.3-1 provides a summary of the databases searched.

Table 3.3-1. Online Database Listings

Database	Details
California Environmental Protection Agency (CalEPA) https://siteportal.calepa.ca.gov/nsite/	The CalEPA Regulated Site Portal is a website that combines data about environmentally regulated sites and facilities in California into a single, searchable database and interactive map. Data sources include California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxics Release Inventory (TRI).
Department of Toxic Substance Control (DTSC) EnviroStor https://www.envirostor.dtsc.ca.gov/	The DTSC's data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons for further investigation.
Regional Water Quality Control Board (RWQCB) GeoTracker http://geotracker.waterboards.ca.gov/	The California RWQCB's data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, various unregulated projects, and permitted facilities. Sites include leaking underground storage tanks, Department of Defense, Cleanup Program, Irrigated Lands, Oil and Gas Production, permitted underground storage tanks, and Land Disposal Sites.
National Pipeline Mapping System https://www.npms.phmsa.dot.gov/	The National Pipeline Mapping System Public Map Viewer is a web-based application designed to assist the general public with displaying and querying data related to gas transmission and hazardous liquid pipelines, liquefied natural gas plants, and breakout tanks under Department of Transportation Pipeline and Hazardous Material Safety Administration jurisdiction.
California Geologic Energy Management Division (CalGEM) Well Finder https://www.conservation.ca.gov/calgem/Pages/Wellfinder.aspx	The CalGEM Well Finder is a web-based application that plots reported locations and other information for oil and gas wells and other types of related facilities across California.
CalRecycle Solid Waste Information System (SWIS) https://www2.calrecycle.ca.gov/SolidWaste/Site/Search	The SWIS database contains information on solid waste facilities, operations, and disposal sites throughout California.
County of San Diego Department of Environmental Health and Quality (DEHQ) Environmental Health Document Search https://www.sandiegocounty.gov/content/sdc/deh/doclibrary/	The Environmental Health Document Search provides access to DEHQ documents published through the content library. Documents are searchable by APN, address, or record ID.

Project Site

As noted in the Phase I ESA, the project site was identified twice in GeoTracker's Cleanup Program Site database, once under Port of San Diego, 1440 Tidelands Avenue, and once under Cole Industries, 1640 Tidelands Avenue. Hazardous materials sites on the project site and in the vicinity are shown on Figure 3.3-1, Locations of Hazardous Materials Sites.

- The Port of San Diego listing includes a single document from County of San Diego, which notes a case for A&E Industries was open in 1992 following a referral that copper slag and oil were found on the ground. The case was referred to the Department of Toxic Substance Control (DTSC) in 1995, and the County of San Diego case was closed (County of San Diego 2012). The EnviroStor database has a case file on A&E Industries, which notes an investigation was completed following the aforementioned referral; the site did not qualify for further remedial site assessment under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the case went inactive (DTSC 2025a).
- The Cole Industries listing has no information, but references a County of San Diego Department of Environmental Health and Quality (DEHQ) Case Number, H04936-001. Closure documents retrieved from the DEHQ Document Library state a leaking underground storage tank was removed from the site, and soil samples confirmed diesel impacts were not identified (County of San Diego 1987).

Adjoining and Surrounding Sites

The following sites are further discussed due to their proximity to the project site and/or the data indicate contamination has impacted the project site.

- **San Diego Naval Base.** As noted in the Phase I ESA, the San Diego Naval Base adjoins the project site to the west. Numerous ongoing cleanup activities are located on the Naval Base, including soil and groundwater investigations due to former ship dismantling operations and imported dredge fill used to construct the piers. These investigations are limited to the current Naval Base site, and do not appear to investigate conditions of the project site, nor do they indicate contamination migration to the project site.

  The Naval Base also has an active hazardous waste operating permit, issued for collection, consolidation, storage, and transfer of hazardous wastes generated by the federal government related to naval operations. The hazardous waste facility, Building 3458, adjoins the project site to the west. A corrective action began in 2010, and included stabilization measures for groundwater migration and human exposure (DTSC 2025b).

3.3.2.4 Previous Environmental Investigations

A Phase I ESA was completed on the project site in December 2024. Phase I ESA identified two recognized environmental conditions (RECs):

- **REC No. 1.** The project site was listed on several regulatory databases, including the San Diego Department of Environmental Health and Quality (DEHQ) Site Assessment and Mitigation (SAM) Investigation database. The listing provided little information, noting an investigation that took place in 1987 under the Voluntary Assistance Program. The Phase I ESA notes that the project site listings appeared to be related to operations on the former parent parcel. Due to the lack of information and date of closure, the Phase I ESA identified this series of listings as a REC.

- **REC No. 2.** The western adjoining San Diego Naval Station was identified in multiple databases. Permitted hazardous waste handling and groundwater contamination were discussed, but no details were provided regarding the type and extent of groundwater contamination. Due to the groundwater impacts and location, the Phase I ESA identified this site as a REC.

The Phase I ESA Peer Review notes the two RECs identified in the Phase I ESA were not sufficiently justified, and the RECs should be independently evaluated to determine if hazardous material releases have occurred that could impact the project site. As discussed in Section 3.3.2.3, regulatory databases were reviewed as part of this assessment, including the regulatory listings identified as RECs in the Phase I ESA. The following provides further information associated with each REC identified in the Phase I ESA:

- **REC No. 1** was related to listings identified on the project site, specifically Port of San Diego and Cole Industries. The Port of San Diego listing does not provide environmental data, but notes the site did not qualify for further remedial site assessment under CERCLA at the time of the investigation (1996) (DTSC 2025a). The Cole Industries listing notes soil samples confirmed diesel impacts were not identified (County of San Diego 1987). The lack of data on the Port of San Diego listing (also referred to as A&E Industries) limits the ability to determine if current soil or groundwater contamination is present. Additionally, changes in environmental regulations since the time of the previous investigation have resulted in lower environmental screening levels, meaning existing contamination, if any, could warrant further investigation under current regulations. Soil sampling completed on the project site in 2025 (discussed further below) did not identify contamination in soils sampled from multiple locations and depths across the project site. As such, there do not appear to be soil impacts associated with past operations or releases, including those identified in REC No. 1.
- **REC No. 2** was related to the western adjoining naval base, San Diego Naval Station. The REC notes the potential for groundwater contamination, but no specific data were provided. The regulatory database search (Section 3.3.2.3) identified ongoing cleanups associated with operation at the naval base, including ongoing hazardous waste handling, but these investigations have been limited to the current naval base site, and do not appear to investigate conditions of the project site, nor do they indicate contamination migration to the project site.

In addition to the Phase I ESA, a Soil Evaluation was also completed on the project site (Appendix D2). As discussed in the Phase I ESA Peer Review, the Soil Evaluation was independent of previous investigations or assessments, including the Phase I ESA. The Soil Evaluation included collection of 10 samples from five various locations across the project site. Samples were collected from 3 and 8 feet below ground surface. While some soil samples contained concentrations of total petroleum hydrocarbons (TPH), metals, and polyaromatic hydrocarbons (PAHs), none of the detected concentrations exceeded environmental screening levels for commercial/industrial use (SFBRWQCB 2025). Based on these data, soils do not appear to be impacted by past operations or releases, including those identified in REC No. 1.

Groundwater is expected to be approximately 10 feet below ground surface (County of San Diego 1998), with a generally flat gradient (Arcadis 2025; County of San Diego 1998), and has no beneficial uses (County of San Diego 1996). While there are no data indicating groundwater beneath the project site currently contains contaminants of concern, groundwater conditions at the project site are unknown.

3.3.3 Applicable Laws and Regulations

Federal

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program, which is administered by the Environmental Protection Agency, to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. The RCRA program also establishes standards for hazardous waste treatment, storage, and disposal units, which are intended to have hazardous wastes managed in a manner that minimizes present and future threats to the environment and human health. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days or treated or disposed of at a facility, any treatment, storage, or disposal unit must be permitted under the RCRA. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous materials.

Department of Transportation Hazardous Materials Regulations

U.S. Department of Transportation (DOT) Hazardous Materials Regulations (Code of Federal Regulations [CFR] Title 49, Parts 100–185) cover all aspects of hazardous materials packaging, handling, and transportation. Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), 173 (Packaging Requirements), 177 (Highway Transportation), 178 (Packaging Specifications), and 180 (Packaging Maintenance) would all apply to goods movement to and from the proposed project and/or surrounding uses. Enforcement of these aforementioned DOT regulations is shared by each of the following administrations under delegations from the Secretary of the DOT.

- Research and Special Programs Administration is responsible for container manufacturers, reconditioners, and re-testers and shares authority over shippers of hazardous materials.
- Federal Highway Administration enforces all regulations pertaining to motor carriers.
- Federal Railroad Administration enforces all regulations pertaining to rail carriers.
- Federal Aviation Administration enforces all regulations pertaining to air carriers.
- U.S. Coast Guard enforces all regulations pertaining to shipments by water.

Comprehensive Environmental Response, Compensation, and Liability Act

CERCLA, commonly known as Superfund, was enacted in 1980 to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided 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. The corresponding regulation in 42 CFR 103 provides the general framework for response actions and managing hazardous waste

Spill Prevention Control and Countermeasure Plans

Spill Prevention Control and Countermeasure (SPCC) plans (40 CFR 112.7) are required for facilities in which construction and removal operations involve oil in the vicinity of navigable waters or shorelines. SPCC plans ensure that facilities implement containment and other countermeasures that would prevent oil spills from reaching navigable waters. SPCC plans are regulations administered by the Environmental Protection Agency. Preparation of an SPCC plan is required for projects that meet three criteria: (1) the facility must be non-transportation-related, or, for construction, the construction operations involve storing, using, transferring, or otherwise handling oil; (2) the project must have an aggregate aboveground storage capacity greater than 1,320 gallons or completely buried storage capacity greater than 42,000 gallons; and (3) there must be a reasonable expectation of a discharge into or upon navigable waters of the United States or adjoining shorelines. For construction projects, for criterion (1), 40 CFR 112 describes the requirements for implementing SPCC plans. The following three areas should clearly be addressed in a SPCC plan.

- Operating procedures that prevent oil spills.
- Control measures were installed to prevent a spill from reaching navigable waters.
- Countermeasures to contain, clean up, and mitigate the effects of an oil spill that reaches navigable waters.

United States Coast Guard Navigation and Navigable Waters, and Shipping

The U.S. Coast Guard, through Title 33 (Navigation and Navigable Waters) and Title 46 (Shipping) of the CFR, is the federal agency responsible for vessel inspection, marine terminal operations safety, coordination of federal responses to marine emergencies, enforcement of marine pollution statutes, marine safety (such as navigation aids), and operation of the National Response Center for spill response, and is the lead agency for offshore spill response. The U.S. Coast Guard implemented a revised vessel-boarding program in 1994 designed to identify and eliminate substandard ships from U.S. waters. The program pursues this goal by systematically targeting the relative risk of vessels and increasing the boarding frequency on high risk (potentially substandard) vessels. The relative risk of each vessel is determined through the use of a matrix that factors the flag of the vessel, owner, operator, classification society, vessel particulars, and violation history. Vessels are assigned a boarding priority from I to IV, with priority I vessels being the potentially highest risk and priority IV having relatively low risk.

Emergency Planning and Community Right-To-Know Act

The Emergency Planning and Community Right-to-Know Act (42 USC 11001 et seq.) was enacted by Congress as the national legislation on community safety in 1986, as Title III of the Superfund Amendments and Reauthorization Act. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. To implement this act, Congress required each state to appoint a State Emergency Response Commission. These commissions are required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district. The act provides requirements for emergency release notification, chemical inventory reporting, and toxic release inventories for facilities that handle chemicals.

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act establishes the framework for safe and healthful working conditions for working men and women by authorizing enforcement of the standards developed under the act. The act also provides for training, outreach, education, and assistance related to establishing a safe working environment. Regulations defining safe standards have been developed for general industry, construction, maritime,

recordkeeping, and agriculture. A major component of the act is the requirement that employers implement the Occupational Safety and Health Act Hazard Communication Standard to provide information to employees about the existence and potential risks of exposures to hazardous substances in the workplace. As part of the Hazard Communication Standard, employers must do the following:

- Obtain material safety data sheets from chemical manufacturers that identify the types and handling requirements of hazardous materials used in given areas.
- Make the material safety data sheets available to their employees.
- Label chemical containers in the workplace.
- Develop and maintain a written hazard communication program.
- Develop and implement programs to train employees about hazardous materials.

Occupational Safety and Health Administration (OSHA) standards specific to hazardous materials are listed in 29 CFR 1910 Subpart H. Safety and health regulations pertaining to construction are listed in 29 CFR 1926 Subpart H.

Code of Federal Regulations Title 14, Part 77-Safe, Efficient Use, and Preservation of the Navigable Airspace

The Code of Federal Regulations (CFR) Title 14, Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace, establishes a notification requirement for objects affecting navigable airspace. CFR Title 14 Part 77 establishes standards for determining the potential hazardous effect of the proposed project on air navigation and operating procedures, identifying mitigating measures to enhance safe air navigation, and charting of new objects. Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the Federal Aviation Administration:

- Any construction or alteration exceeding 200 feet above ground level.
- Any construction or alteration
  - Within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet.
  - Within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet.
  - Within 5,000 feet of a public use heliport which exceeds a 25:1 surface.
- Any highway, railroad or other traverse way whose prescribed adjusted height would exceed the above noted standards.
- When requested by the Federal Aviation Administration.
- Any construction or alteration located on a public use airport or heliport regardless of height or location

Proponents proposing to construct or alter any of the above items must submit Federal Aviation Administration Form 7460-1, Notice of Proposed Construction or Alteration, so the Federal Aviation Administration can review the proposed action and make the appropriate determination.

State

Cortese List

California Government Code Section 65962.5 (commonly referred to as the Cortese List) includes hazardous waste facilities and sites listed by DTSC, Department of Health Services lists of contaminated drinking water wells, sites listed by the State Water Resources Control Board as having underground storage tank leaks or a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

California Health and Safety Code (Hazardous Waste Control Act)

DTSC, a department of California Environmental Protection Agency, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous waste primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Division 20, Chapter 6.5, of the California Health and Safety Code identifies hazardous waste control regulations pertaining to transportation, treatment, recycling, disposal, enforcement, and the permitting of hazardous waste. Division 20, Chapter 6.10, identifies regulations applicable to the cleanup of hazardous materials releases. Title 22, Division 4.5, contains environmental health standards for the management of hazardous waste, as well as standards for the identification of hazardous waste (Chapter 11) and standards that are applicable to transporters of hazardous waste (Chapter 13).

The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act

The Office of Spill Prevention and Response is a division of the California Department of Fish and Wildlife responsible for administering at the state level the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act. The act provides contingency planning for the eventuality of accidental oil spills during transportation of oil (petroleum-based fuels and other fuels including renewable fuels). Contingency planning includes prevention programs, design and operational improvements, immediacy of action, and identification of clean up and repsonse measures and technology. The emphasis is on protecting the California coast including ports and the marine environment, as well as transportation corridors throughout the state (pipelines, railroads, and roads).

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

This program (California Health and Safety Code, Chapter 6.11, Sections 25404–25404.9) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the environmental and emergency response programs and provides authority to the Certified Unified Program Agency (CUPA). The CUPA for San Diego County is the San Diego County Department of Environmental Health's Hazardous Materials Division (HMD), which has the responsibility and authority for implementing and enforcing the requirements listed in Chapter 6.5 (commencing with Section 25100), Chapter 6.67 (commencing with Section 25270), Chapter 6.7 (commencing with Section 25280), Chapter 6.95 (commencing with Section 25500), and Sections 25404.1 and 25404.2, including the following:

- **Aboveground Petroleum Storage Act Requirements for SPCC Plans.** Facilities with a single tank or cumulative aboveground storage capacities of 1,320 gallons or greater of petroleum based liquid product (e.g., gasoline, diesel, lubricants) must develop an SPCC plan. An SPCC plan must be prepared in

accordance with the oil pollution prevention guidelines in 40 CFR 112. This plan must describe the procedures, methods, and equipment needed at the facility to prevent discharges of petroleum from reaching navigable waters. A registered professional engineer must certify the SPCC plan, and a complete copy of the plan must be maintained on site.

- **California Accidental Release Prevention Program.** This program requires any business that handles more than threshold quantities of an extremely hazardous substance to develop a Risk Management Plan. The Risk Management Plan is implemented by the business to prevent or mitigate releases of regulated substances that could have offsite consequences through hazard identification, planning, source reduction, maintenance, training, and engineering controls.
- **Hazardous Materials Business Plan/Hazardous Materials Inventory Statements.** Hazardous Materials Business Plans contain basic information regarding the location, type, quantity, and health risks of hazardous materials and/or waste. Each business must prepare a Hazardous Material Business Plan if that business uses, handles, or stores a hazardous material and/or waste or an extremely hazardous material in quantities greater than or equal to the following.
  - 55 gallons for a liquid
  - 500 pounds for a solid
  - 200 cubic feet for any compressed gas
  - Threshold planning quantities of an extremely hazardous substance
- **Hazardous Waste Generator Program.** This program regulates businesses that generate any amount of a hazardous waste. Proper handling, recycling, treating, storing, and disposing of hazardous waste are key elements to this program.
- **Tiered Permitting Program.** This program regulates the on-site treatment of hazardous waste.
- **Underground Storage Tank Program.** This program regulates the construction, operation, repair, and removal of underground storage tanks that store hazardous materials and/or waste.

Hazardous Waste Control Act

DTSC is responsible for the enforcement of the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), which creates the framework under which hazardous wastes are managed in California. The Hazardous Waste Control Act requires a hazardous waste generator that stores or accumulates hazardous waste for periods greater than 90 days at an on-site facility or for periods greater than 144 hours at an offsite or transfer facility, which treats or transports hazardous waste, to obtain a permit to conduct such activities. The law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA for a cradle-to-grave waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or, in some cases, more stringent than federal requirements, such as mandating source-reduction planning and regulating the number of types of waste and waste management activities that are not covered by federal law with the RCRA.

Environmental Health Standards for the Management of Hazardous Waste

These standards (22 CCR, Division 4.5, Section 66001 et seq.) establish requirements for the management and disposal of hazardous waste in accordance with the provisions of the state Hazardous Waste Control Act and federal RCRA.

California Code of Regulations, Title 8 – Industrial Relations

Title 8 of the California Code of Regulations, Section 1532.1, is a rule developed by the federal OSHA in 1993 and adopted by the State of California. This rule is comparable to the federal standards described above. Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The federal OSHA and the California OSHA are responsible for ensuring worker safety in the workplace. The California OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. These standards would be applicable to both construction and operation of the proposed project. Title 8 includes regulations pertaining to hazard control (including administrative and engineering controls), hazardous chemical labeling and training requirements, hazardous exposure prevention, hazardous material management, and hazardous waste operations.

Title 8 also specifies requirements for the removal and disposal of asbestos-containing materials. In addition to providing information regarding how to remove asbestos-containing materials, specific regulations limit the time of exposure, regulate access to work areas, require demarcation of work areas, prohibit certain activities in the presence of asbestos-containing material removal activities, require the use of respirators, require monitoring of work conditions, require appropriate ventilation, and require qualified persons for asbestos-containing materials removal.

Title 8 also covers the removal of lead-based paint. Specific regulations cover the demolition of structures that contain lead-based paint, the process associated with its removal or encapsulation; remediation of lead contamination; the transportation, disposal, storage, and containment of lead or materials containing lead; and maintenance operations associated with construction activities involving lead, such as lead-based paint. Similar to asbestos-containing material removal, lead-based paint removal requires proper ventilation, respiratory protection, and qualified personnel.

California Labor Code (Division 5, Parts 1 and 7)

California Labor Code regulations ensure appropriate training regarding the use and handling of hazardous materials and the operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5, ensures that employees who handle hazardous materials are appropriately trained and informed about the materials. Division 5, Part 7, ensures that employees who work with volatile flammable liquids are outfitted with appropriate safety gear and clothing.

State Water Resources Control Board Construction General Permit (2009-0009-DWQ)

Construction activities that disturb 1 acre or more of land must obtain coverage under the State Water Resources Control Board Construction General Permit (Order 2009-0009-DWQ as amended by Order 2010-0014-DWQ, and Order 2012-006-DWQ). Under the terms of the permit, project proponents must file a complete and accurate Notice of Intent and Permit Registration Documents with the State Water Resources Control Board. Project proponents must also demonstrate conformance with applicable construction best management practices (BMPs) and prepare a construction Stormwater Pollution Prevention Plan containing a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project site.

2022 California Fire Code

Part 9 of Title 24 (Building Standards Code) contains the California Fire Code (CFC), which incorporates by adoption the International Fire Code with necessary California amendments. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations.

The CFC and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards. The CFC is updated and published every 3 years by the California Building Standards Commission.

The 2022 CFC Section 1207 (Electrical Energy Storage Systems) requires that the design of each battery energy storage "unit" be submitted for review and approval by the local fire code official as part of the permitting process. The results of product-specific full-scale fire testing and the results of the project's HMA can be utilized by the local fire code official to determine acceptable terms and conditions for the installation of such systems throughout California. The 2022 CFC Section 1207 also prescribes the fault conditions or failure modes that shall be taken into account as part of the HMA.

Regional

San Diego County Code, Title 6, Division 8

San Diego County Code of Regulatory Ordinances under Title 6, Division 8, Chapters 8 through 11 establish the HMD as the local CUPA. The HMD is responsible for the protection of public health, safety, and the environment; and inspects businesses or facilities that handle or store hazardous materials, generate hazardous waste, generate medical waste, and own or operate underground storage tanks. HMD also administers the California Accidental Release Prevention Program and the Aboveground Petroleum Storage Act Program, and provides specialized instruction to small businesses through its Pollution Prevention Specialist. HMD has the authority under state law to inspect facilities with hazardous materials or hazardous waste and, in cases where a facility is in non-compliance with the applicable state law or regulations, take enforcement action.

Projects are required to notify HMD regarding the use, handling, release (spills), storage, and/or disposal of hazardous materials and hazardous waste in accordance with existing state law and County of San Diego ordinance. The notification is the initial step in the HMD permitting process, which requires businesses that handle or store hazardous materials, are part of the California Accidental Release Prevention Program, generate or treat hazardous wastes, generate or treat medical waste, store at least 1,320 gallons of aboveground petroleum, or own and/or operate underground storage tanks to obtain and maintain a Unified Program Facility Permit. The online notification must be done using the State of California Environmental Reporting System by the project proponent/permittee requesting a permit and submitted within 30 days.

If a building permit is required, California Government Code Section 65850.2 prohibits building departments from issuing a final Certificate of Occupancy unless a business or facility that handles hazardous materials has submitted and met the requirements of a Hazardous Materials Business Plan. The Hazardous Materials Business Plan contains detailed information on the storage of hazardous materials at regulated facilities and serves to prevent or minimize damage to public health, safety, and the environment from a release or threatened release of a hazardous

material. The Hazardous Materials Business Plan also provides emergency response personnel with adequate information to help them better prepare and respond to chemical-related incidents at regulated facilities.

Operational Area Emergency Plan

The San Diego County Operational Area was formed to help the County of San Diego (County) and its cities develop emergency plans, implement such plans, develop mutual aid capabilities between jurisdictions, and improve communications between jurisdictions and agencies. The San Diego County Operational Area consists of the County and all jurisdictions within the County. The Operational Area Emergency Plan is for use by the County and all of the cities within the County to respond to major emergencies and disasters. It defines roles and responsibilities of all County departments and many city departments.

Cities within the County are encouraged to adopt the Operational Area Emergency Plan, with modifications that would be applicable to each city. The plan is updated once every 4 years by the Office of Emergency Services and the Unified Disaster Council of the Unified San Diego County Emergency Services Organization. The most recent update was adopted by the County Board of Supervisors in September 2018.

The San Diego Unified Port District (District) developed a basic Emergency Operations Plan, as well as supplemental preparedness plans that cover topics such as hazard mitigation and continuity of operations in accordance with the Standardized Emergency Management System (SEMS) and National Incident Management System (NIMS). SEMS and NIMS are the established state and federal emergency response standards, respectively. These standards ensure continuity in planning and response to critical incidents, disasters and planned events which impact communities. The District also developed the Maritime Emergency Restoration Plan, which focuses on resuming maritime operations after incidents, including hazmat incidents. The District's emergency response plans are reviewed and updated regularly in accordance with the SEMS and NIMS standards. Integral in these emergency response plans is coordination between local, state and federal agencies, as well as external communications with the community, businesses and other stakeholders.

County of San Diego Solid Waste Local Enforcement Agency

The County's Solid Waste Local Enforcement Agency is responsible for enforcing federal and state laws and regulations for the safe and proper handling of solid waste in San Diego County, excluding the City of San Diego, which are overseen by the City of San Diego's Solid Waste Local Enforcement Agency. State law (Public Resources Code) requires that every local jurisdiction designate a Solid Waste Local Enforcement Agency that is certified by the Department of Resources Recycling and Recovery to enforce federal and state laws and regulations for the safe and proper handling of solid waste. The Local Enforcement Agency is primarily responsible for overseeing permitting, operation, and closure of solid waste disposal sites.

Any development plan proposing to handle, process, transport, store, or dispose of solid wastes—including household trash and garbage, construction debris, commercial refuse, sludge, ash, discarded appliances and vehicles, manure, landscape clippings, and other discarded wastes—must contact the Local Enforcement Agency for determination of the need for a solid waste facility permit.

Local

BMP Design Manual

In June 2015 the District adopted a jurisdiction-specific local BMP Design Manual to address the requirement of the Municipal Permit. This BMP Design Manual is applicable to projects carried out on District-managed tidelands. Pursuant to the Municipal Permit, the District began implementing the BMP Design Manual on February 16, 2016. The District's BMP Design Manual identifies updated post-construction stormwater requirements for both tenant- and District-sponsored major maintenance or capital improvement projects as required by the Municipal Permit.

The BMP Design Manual identifies BMP requirements for both standard projects and priority development projects as outlined in the permit. All new development and redevelopment projects are required to implement standard source control and site design BMPs to eliminate or reduce stormwater runoff pollutants. For priority development projects, the BMP Design Manual also describes structural treatment controls that must be incorporated into the site design and, where applicable, addresses potential hydromodification impacts from changes in flow and sediment supply.

Project proponents must submit a Storm Water Quality Management Plan accurately describing how the project will meet source control site design and pollutant control BMP requirements. District staff provide technical review of and approve Storm Water Quality Management Plan documents and drainage design plans to ensure that pollutant control BMP requirements are met. The Storm Water Quality Management Plan is evaluated for compliance with the Municipal Permit and with design criteria outlined in the District's BMP Design Manual. Once the approval process is complete, the project is able to commence and routine inspections are conducted throughout the duration of the project construction. The proposed project is a priority development project, and therefore a Storm Water Quality Management Plan and treatment control BMPs are required.

San Diego Unified Port District Port Code, Article 10

Article 10 of the District's Port Code, SDUPD Stormwater Management and Discharge Control, prohibits the deposit or discharge of any chemicals or waste to the tidelands or San Diego Bay and makes it unlawful to discharge pollutants directly into non-stormwater or indirectly into the stormwater conveyance system. The proposed project would be obligated to abide by Article 10 of the Port Code.

Naval Air Station North Island Airport Land Use Compatibility Plan

The San Diego County Regional Airport Authority approved the Airport Land Use Compatibility Plan for Naval Air Station North Island on October 2, 2020 (SDCRAA 2020). The project site is located within the Airport Influence Area and Airspace Protection Boundary for Naval Air Station North Island. An Airport Land Use Compatibility Plan governs the suitable land uses that may locate within a specified boundary of a public or military airport, to protect the public. The Airport Influence Area represents that specified area surrounding an airport where current and projected airport-related noise, safety, airspace protection, and overflight factors may influence land uses. The project site is located within the Airport Influence Area and Air North Island Airport Land Use Compatibility Plan and is consistent with the safety and noise standards of the 2011 Air Installations Compatible Use Zones study prepared by the U.S. Navy for Naval Air Station North Island. The Applicant will be required to obtain clearance from the FAA to determine the project will not pose a hazard, or alternatively the Applicant shall obtain a certification from a licensed professional that there is no need to file a notice of construction per Title 14 Code of Federal Regulations.

3.3.4 Project Impact Analysis

3.3.4.1 Methodology

The following impact analysis evaluates the potential effects from hazards and hazardous materials associated with the project. The reposed listed above under Section 3.3.1, Overview, were used to evaluate potential impacts associated with hazards and hazardous materials. Based on the existing conditions described above, the impact analysis assesses the direct and indirect impacts related to hazards and hazardous materials by determining whether the project would trigger any of the thresholds below.

3.3.4.2 Thresholds of Significance

The significance criteria used to evaluate the project's impacts to hazards and hazardous materials are based on California Environmental Quality Act (CEQA) Guidelines Appendix G. For the purposes of this project, a potentially significant impact to hazards and hazardous materials would occur if the proposed project would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
2. 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.
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
4. 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 result, would it create a significant hazard to the public or the environment.
5. 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.
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

As discussed in the Environmental Initial Study Checklist (Appendix A), Thresholds 3, 5, 6, and 7 are not included in the analysis below: the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school (Threshold 3); result in a safety hazard or excessive noise for people residing or working in the project area within an airport land use plan (Threshold 5); impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (Threshold 6); or expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires (Threshold 7). These conclusions are summarized in Section 5.5, Effects Found Not to Be Significant, of this Draft EIR. Therefore, only Thresholds 1, 2, and 4 are discussed in the impact analysis below.

3.3.4.3 Project Impacts and Mitigation Measures

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

Impact Discussion

Construction

Construction of the project (zero-emissions vehicle [ZEV] truck charging, photovoltaic [PV] canopy, battery energy storage system [BESS], convenience store, and infrastructure improvements) would not involve the routine transport, use, or disposal of significant quantities of hazardous materials. Most hazardous materials used and hazardous waste generated by the project would occur during the temporary construction period. Hazardous materials may include small quantities of gasoline, diesel fuels, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliative, herbicides, and welding materials/supplies. Some solid hazardous waste, such as welding materials and dried paint, may also be generated during construction.

The use, storage, and disposal of hazardous materials and waste associated with project construction could result in potential adverse health and environmental impacts if these materials were to be used, stored, or disposed of improperly, causing accidents and spills. Incidents of this nature could release hazardous substances into the environment and could cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. The project would require implementation of BMPs as part of a Stormwater Pollution Prevention Plan, which is required as part of compliance with the National Pollutant Discharge Elimination System Construction General Permit. Implementation of the Stormwater Pollution Prevention Plan and associated BMPs would reduce the potential for stormwater pollution, including from any on-site hazardous materials during construction. In addition, if construction of the project resulted in on-site storage of threshold quantities of hazardous materials (55 gallons of liquid, 500 pounds of solid, 200 cubic feet of gas), the applicant is required to prepare and submit a Hazardous Material Business Plan (HMBP) under California Health and Safety Code Sections 25500 through 25519 and CCR Sections 5010.1 through 5040.2. The HMBP requires inventory and secure storage of hazardous materials, emergency response procedures, training for staff, and qualifies the site for regular inspections by the local CUPA, which is County of San Diego DEHQ. While unlikely, if aboveground oil storage, including equipment fuel, lubricant oils, and cooling oils in transformers and equipment, exceeds 1,320 gallons, an SPCC Plan is required to be prepared and implemented at the site under 40 CFR 112. The SPCC Plan regulations further require secondary containment, protection from stormwater runoff, and emergency response procedures.

Any hazardous wastes produced as a result of project construction would be collected and transported away from the project in accordance with federal, state, and local regulations. Hazardous waste would be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped off-site for recycling or disposal would be transported by a licensed and permitted hazardous waste hauler and disposed of at an approved location. Any non-hazardous debris generated during project construction would be disposed of in local landfills.

The Tesla battery enclosures are shipped with battery modules installed and partially charged. Batteries would be delivered to the project site in DOT-certified vehicles and in compliance with all applicable requirements of the DOT, CHP, and California Department of Motor Vehicles. Lithium-ion batteries are classified as a Class 9 hazardous material and therefore must meet DOT Hazardous Material Regulations (49 CFR 171-180). To further mitigate potential risks, the project's ERP includes detailed procedures for emergency response during all phases of the

BESS lifecycle, including construction, commissioning, operation, maintenance, and decommissioning. The BESS containers are also designed with a number of fire safety features, including deflagration control, battery management and external flame detection, designed to mitigate the propagation of a battery failure or prevent the failure from occurring altogether. Given the regulatory safeguards, engineered safety features, and emergency protocols in place, the potential for routine transport or accidental release of hazardous materials associated with the BESS is considered minimal.

Overall, project construction activities would occur in accordance with all applicable local standards set forth by the District, as well as state and federal health and safety requirements that are intended to minimize hazardous materials risk to the public, such as California OSHA requirements, the Hazardous Waste Control Act, and the California Health and Safety Code. All hazardous materials associated with project construction would be used in accordance with applicable regulations. The construction contractor would be required to implement such regulations relative to the transport, handling, and disposal of any hazardous materials, including the use of standard construction controls and safety procedures that would avoid or minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local and state laws. Due to the relatively limited use and small quantities of hazardous materials, and the required compliance with applicable regulations for the transportation and handling of hazardous materials, impacts during construction would be **less than significant**.

Operation

Operations and maintenance activities associated with ZEV charging stations and PV canopies are relatively minor when compared to conventional power plants or other industrial land uses and would require limited use of hazardous materials and generation of hazardous waste. Hazardous materials in quantities that would create a significant risk to the public or environment generally are not stored on-site during operations except for the on-site batteries, which would be stored in compliance with the CFC and National City Fire Code requirements. The BESS would also be equipped with heating, ventilation, and air conditioning (HVAC) systems for thermal management of the batteries. Limited amounts of hazardous materials would be used on the site during operations, which includes diesel fuel, gasoline, and motor oil from vehicles using, maintaining, restocking, or otherwise servicing the project including the convenience store, as well as mineral oil to be sealed within the transformers. All transformers would be equipped with spill containment areas and battery storage would be in compliance with OSHA requirements, such as the inclusion of ventilation, acid-resistant materials, and spill response supplies.

During normal operations, there will be no toxic air emissions from the project. The BESS will be equipped with (i) monitoring and control systems; (ii) flame detection and deflagration protection systems; and (iii) battery management systems, among others, to prevent, monitor, and/or control any battery cell malfunctions.

The proposed BESS facility and location pose minimal risk to public or life safety and property by way of being on a secured site. The BESS facility would be bound by a chain-link fence to prevent unauthorized access to the facility. The battery units are provided with the minimum required separation distances from the adjacent exposures. Training will be provided to the First Responders to familiarize themselves with the site and hazards associated with lithium-ion BESS, based on safe operating procedures to address the unlikely event of an incident at the site (Appendix D4). As such, operation of the project would not 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**.

Decommissioning

As the project site is leased from the District, it is anticipated that the facility would be decommissioned at the end of the lease term unless renewed. Decommissioning activities may be negotiated between the project proponent and the District but would typically include the removal of all project components, including ZEV charging equipment, PV canopies, the BESS, the convenience store, and associated infrastructure such as fencing, concrete pads, and utility connections. Decommissioning of the project shall take place in accordance with the approved Decommissioning Plan filed with the project's ERP. Deactivation, de-energizing, dismantling, and removal of the system shall be conducted by trained and knowledgeable persons in accordance with the manufacturer's specifications.

During the decommissioning and disposal process, equipment would be de-energized prior to removal, and materials would be salvaged (where possible), recycled, or disposed of at an appropriately licensed disposal facility. Removal of the PV modules would include removing the racks on which the solar panels are attached and placing them in secure transport crates and a trailer for storage until transportation to another facility, a recycling, or disposal facility can take place. The project would include BMPs to ensure the collection and recycling of modules and to avoid the potential for modules to be disposed of as municipal waste. Fencing and gates would also be dismantled and recycled where feasible.

The BESS containers, which contain lithium-ion batteries, would be handled in accordance with applicable hazardous waste regulations. Batteries would be discharged, removed, and transported off-site for recycling or disposal in compliance with federal "universal waste" regulations (40 CFR Part 273) and California hazardous waste laws.

The area would be thoroughly cleaned and all debris removed. Materials would be recycled to the extent feasible, with minimal disposal to occur in landfills in compliance with all applicable laws. All project materials would be transported in accordance with applicable waste and recycling transport regulations for hazardous and non-hazardous materials at the time of decommissioning. Hazardous material handling, as required during the decommissioning process, would follow the same rules and regulations as those applicable during the construction process, including HMBP and California OSHA.

The project would implement BMPs to ensure proper handling, recycling, and disposal of materials, and to prevent the release of hazardous substances (see also Section 3.4, Hydrology and Water Quality). Due to the limited quantities of hazardous materials required for use in the construction, operation, and decommissioning of the proposed project, the project would not 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**.

Level of Significance Prior to Mitigation

Impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be **less than significant**.

Threshold 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?

Impact Discussion

Construction

As discussed in Section 3.3.2, Existing Conditions, past operations on the project site may have involved hazardous material use, and releases of hazardous materials have occurred. These releases have been reviewed by regulatory agencies, including County of San Diego DEHQ and DTSC, and were determined to not pose a threat to human health or the environment at the time of the evaluation. A Soil Evaluation (Appendix D2), completed in April 2025, confirmed no soil impacts appear to be present on the project site. Soils were evaluated for TPH, VOCs, SVOCs, PAHs, PCBs, and metals, and none of these listed contaminants of concern were identified above applicable regulatory screening levels (environmental screening levels for commercial/industrial use). As such, soil impacts are not expected to be encountered during construction, and no significant impact due to the release of hazardous materials during excavation activities would occur.

Also discussed in Section 3.3.2, while there are no data suggesting the presence of contaminants of concern in groundwater at the project site, groundwater conditions are unknown. Due to the presence of shallow groundwater (approximately 10 feet below ground surface), and long history of military and industrial operations at the project site and in the surrounding areas, there is a possibility that groundwater contamination may be present. However, groundwater in the area does not have a beneficial use, and, as water will be supplied by Sweetwater Authority, groundwater is not expected to be used for any stage of the proposed project. Should construction require groundwater dewatering for excavations that reach the water table, a discharge permit would be required whether water is discharged to the sanitary sewer (managed by the City of National City) or stormwater (managed by San Diego Regional Water Quality Control Board). Dewatering water could also be containerized and disposed of off site, but discharge of groundwater from construction dewatering without a permit is against city and regional rules and regulations. Dewatering permits and disposal would require characterization of the groundwater, at which time contamination, if any, would be identified, and appropriate handling and treatment procedures would be implemented as required by the receiving facility. As such, groundwater impacts are not expected to result in a significant impact due to the release of hazardous materials during construction activities.

Potential impacts that may result from upset or accidents during construction of the project include the accidental release of materials, such as gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliative, and welding materials/supplies. Generally, the quantities of these hazardous materials would be relatively limited and handled in accordance with manufacturer's guidelines. As noted under Threshold 1, should quantities of hazardous materials exceed 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas, an HMBP is required to be implemented and submitted to the local CUPA. The HMBP requires staff training for those that handle hazardous materials, and emergency response procedures should a release occur.

Additionally, implementation of the BMPs required by the National Pollutant Discharge Elimination System Construction General Permit would include containment and spill response measures and the project's ERP provides site-specific procedures for responding to hazardous material incidents during construction. The ERP outlines emergency response protocols in the event of a spill or upset condition, and includes coordination with local emergency services.

With the implementation of these existing regulatory measures, engineered controls, and emergency protocols, the potential for upset or accident conditions involving hazardous materials during construction would be effectively managed. Therefore, impacts from upset and accident conditions related to hazardous materials used during project construction would be **less than significant**.

Operation

The proposed BESS facility would use lithium-ion batteries, which contain flammable and corrosive liquid materials. However, under normal operations, energy storage facilities do not store or generate hazardous materials in quantities that would represent a risk to off-site receptors and no reportable quantities of acutely or extremely hazardous materials would be transported, stored, or used at the site. As discussed in Section 3.1, Air Quality, it is possible that a thermal runaway event and/or a fire could occur in the event of a battery cell malfunction. The proposed project BESS system is designed to contain such fires within a single battery module, and if a fire does occur, pollutants could be emitted to the atmosphere. However, batteries would be housed in an enclosure and contained according to specifications that follow applicable federal, state, and local requirements, including appropriate ventilation, acid resistant materials, and presence of spill response supplies. The BESS enclosure would also be equipped with HVAC systems for thermal management of the batteries. Enclosures used to store hazardous materials would also be inspected regularly for any signs of failure or leakage.

A hazardous consequence analysis was prepared to evaluate potential acute health impacts from toxic air contaminant emissions from a thermal runaway event at proximate receptors based on UL9540A testing. The analysis evaluated 10 times the number of cells that underwent thermal runaway in the UL9540A testing. The analysis used dispersion modeling and the toxic pollutants identified in the UL9540A testing to evaluate potential offsite impacts. As discussed in Section 3.1.4.3 and shown in Table 3.1-8, Hazardous Consequence Analysis Results, in Section 3.1, the results of the hazardous consequence analysis showed that the acute hazard index at the point of maximum impact would be below the threshold of 1.0. As such, impacts would be less than significant.

In addition, an HMA (Appendix D4) was prepared for the project to assess the safety and overall effectiveness of barriers set in place to prevent and mitigate consequences of potential battery failure scenarios. The project utilizes Tesla Megapack 2 XL battery units as its BESS. Voluntary fire propagation modeling was conducted by Tesla to determine the anticipated impacts on representative target Megapack 2 XL units from an external heat flux generated by a failing unit. Even with worst-case wind scenarios taken into account, in the unlikely event of a Megapack 2 XL fire, the model shows that thermal runaway would not propagate to the adjacent units that are installed as per Tesla's site design requirements. A site-specific draft ERP was also prepared for this project, detailing emergency response procedures to guide first responders in the event of a battery-related failure on-site. The proposed BESS facility and location pose minimal risk to public or life safety and property by way of being on a secured site away from public spaces or roadways with limited public access to the site. The BESS facility is bounded by a chain-link fence to prevent unauthorized access to the facility. The battery units are provided with the minimum required separation distances from the adjacent exposures. Training will be provided to the first responders to familiarize themselves with the site and hazards associated with lithium-ion BESS, based on safe operating procedures to address the unlikely event of an incident at the site (Appendix D4).

While data on electric truck fires are limited due to the low number of electric trucks and recorded fire incidents, available data on passenger vehicle fires indicate that electric battery passenger vehicle fires are much less common than internal combustion engine vehicle fires. Data show that fire incident frequency for electric battery passenger vehicles is generally 8–20 times lower than for internal combustion engine passenger vehicles (RISE 2023). However, if an electric battery vehicle fire does occur, it can be more difficult to extinguish and may require

a specialized response. Even with these considerations, the potential for electric battery trucks to experience a fire is considered low and comparable to or less than that of diesel trucks. In the unlikely event that an electric battery truck fire occurs on site, it would be managed in accordance with the project's ERP (Appendix D5), consistent with the Tesla Semi Emergency Response Guide (Tesla 2022) and the U.S. Fire Administration Electric Vehicle Fire/Rescue Response Operations (U.S. Fire Administration 2025). Additionally, the ERP for the proposed project was prepared and is consistent with the City of National City's Draft Standard Operating Procedure for Electric Vehicle Fires. A truck fire occurring off site would be addressed by the appropriate local fire agency.

Due to the engineered safety features of the BESS, the results of the hazardous consequence analysis, and the implementation of a site-specific ERP and HMA, the potential for upset or accident conditions involving hazardous materials during project operation would be effectively minimized. The facility's location on a secured site, combined with first responder training and adherence to applicable federal, state, and local regulations, further reduces the risk to public health and safety. Therefore, impacts from upset and accident conditions related to hazardous materials used during project operation would be **less than significant**.

Decommissioning

As described under Threshold 1, decommissioning of the project would involve the removal and proper disposal or recycling of all project components. Project materials would be recycled to the extent feasible, with minimal disposal to occur in landfills in compliance with all applicable laws.

The BESS containers would be handled in accordance with applicable hazardous waste regulations. Batteries would be discharged, removed, and transported off-site for recycling or disposal in compliance with federal "universal waste" regulations (40 CFR Part 273) and California hazardous waste laws. To further reduce the potential for upset or accident conditions during decommissioning, the project's ERP contains procedures to address decommissioning-specific hazards. With the implementation of these regulatory safeguards, recycling protocols, and emergency response procedures, the potential for reasonably foreseeable upset or accident conditions involving hazardous materials during decommissioning would be effectively minimized. Therefore, potential impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials during project decommissioning would be **less than significant**.

Level of Significance Prior to Mitigation

Impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be **less than significant**.

Threshold 4: Would the project be located on a site that 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?

Impact Discussion

As discussed in Section 3.3.2, the project site is not located on, nor is it impacted by, a hazardous material release site listed pursuant to Government Code Section 65962.5 (Cortese List sites). As such, the project would not be located on a site included on this list, would not create a significant hazard to the public or environment as a result, and impacts would be **less than significant**.

Level of Significance Prior to Mitigation

Impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be **less than significant**.

SOURCE: State Water Resources Control Board 2025; Department of Toxic Substances Control 2025

DUDEK

0 460 920 Feet

FIGURE 3.3-1

Locations of Hazardous Materials Sites

Tidelands Avenue Electric Truck Hub

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3.4 Hydrology and Water Quality

3.4.1 Overview

This section describes the existing hydrology and water quality conditions of the proposed Tidelands Avenue Electric Truck Hub Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

Information on hazards and hazardous materials in this section is summarized from the following reports:

- Stormwater Pollution Prevention Plan (SWPPP), Zero-Emission Truck Charging Facility (Appendix E1)
- Storm Water Quality Management Plan (SWQMP) Concept Skycharger Zero-Emission Truck Charging Facility (Appendix E2)
- SWQMP Concept Skycharger Zero-Emission Truck Charging Facility Peer Review Technical Memorandum (Appendix E3)

3.4.2 Existing Conditions

The project site is a fully developed industrial facility, encompassing approximately 4.8 acres within an 8.2-acre parcel. The area is primarily paved with asphalt, serving as an overflow and chassis storage facility. There are no structures on-site, and the project site is surrounded by commercial, industrial, and military land uses.

The underlying soil at the project site is designated as Huerhuero-Urban land complex, per the U.S. Department of Agriculture, Natural Resources Conservation Services. No existing natural hydrologic features, such as watercourses, seeps, springs, or wetlands are present at the Site. A Soil Evaluation was completed on the project site (Appendix D2), which included collection of 10 samples from five various locations across the project site. Samples were collected at 3 and 8 feet below ground surface. While some soil samples contained concentrations of total petroleum hydrocarbons (TPH), metals, and polyaromatic hydrocarbons (PAHs), none of the detected concentrations exceeded environmental screening levels for commercial/industrial use (SFBRWQCB 2025). Based on these data, soils do not appear to be impacted by past operations or releases.

3.4.2.1 Surface Water Hydrology

The project site is within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). The San Diego Region is divided into 11 hydrologic units (HUs) for administrative purposes. Each of the HUs flow from elevated regions in the east to lagoons, estuaries, or bays in the west and feature similar water quality characteristics and issues. The proposed project is within the Pueblo San Diego HU, which is part of the larger San Diego Bay Watershed. The Pueblo San Diego HU is the smallest in San Diego County and covers approximately 60 square miles of predominantly urban landscape in the cities of San Diego, La Mesa, Lemon Grove, and National City. Approximately 75% of the watershed is developed (Project Clean Water 2025). The Pueblo San Diego HU contains three hydrologic areas: Point Loma (908.1), San Diego Mesa (908.2), and National City (908.3). The project site is in the National City hydrologic area. Major water features in the Pueblo San Diego HU include Chollas Creek, Paleta Creek, and San Diego Bay (Project Clean Water 2025). The project site is east of the San Diego Bay. Pueblo San Diego has no central stream system and instead consists primarily of a group of relatively small local creeks and pipe conveyances, many of which are concrete-lined and drain directly into San Diego Bay.

3.4.2.2 Surface Water Quality

The receiving water for this project is San Diego Bay, which is listed under the Clean Water Act Section 303(d) as an impaired water body. The most significant sources of pollutants affecting the beneficial uses of San Diego Bay are urban and agricultural runoff, resource extraction, septic systems, and marinas and boating activities (Project Clean Water 2025).

San Diego Bay is listed as impaired by mercury, polychlorinated biphenyls (PCBs), and polycyclic aromatic hydrocarbons (PAHs), as shown in Table 3.4-1. However, San Diego Bay is not listed as impaired for sediment.

Table 3.4-1. 303(d)-Listed Impairments for Water Bodies Within the Project Vicinity

Reach	303(d)-Listed Impairments	Source	Estimated TMDL Completion Date
San Diego Bay	Mercury	A Source Unknown Atmospheric Deposition Contaminated Sediments Historic Land Management Activities Other Urban Runoff	2027
	PCBs	A Source Unknown Contaminated Sediments Dredging Historic Land Management Activities Illegal dumping Spills Urban Runoff/Storm Sewers	2021
	PAHs	A Source Unknown	2025

Source: SWRCB 2024.
Notes: TMDL = total maximum daily load; PCBs = polychlorinated biphenyls; PAHs = polycyclic aromatic hydrocarbons

San Diego Bay is on the 303(d) list as impaired for PCBs in fish tissue. PCBs are anthropogenic, persistent organic chemicals that can bioaccumulate and bio-magnify in the food web. Legacy contaminated sites, improper disposal of equipment and materials, contaminated runoff, and effluent are all sources of PCBs to San Diego Bay. To address sediment PCB pollution in San Diego Bay, the San Diego Water Board's Site Cleanup Program has completed several contaminated site clean ups, including the Convair Lagoon site approximately 6 miles northwest of the project site, where total PCBs in sediments exceeded 1,800,000 µg/Kg prior to clean up (SWRCB 2021). San Diego Bay remains on the 303(d) list as impaired for mercury. Sources of mercury include atmospheric deposition, contaminated sediments, historic land management activities, and urban runoff.

3.4.2.3 Drainage Patterns

The project site is generally level, with ground elevations ranging from approximately 10 to 13 feet above mean sea level. Existing drainage directs stormwater runoff to a District managed storm drain inlet within the project site or to off-site storm drain inlets along Tidelands Avenue. Stormwater then eventually discharges downstream through an outfall into the San Diego Bay. Stormwater discharges from the project site are not considered direct discharges, as water from the site travels through a series of conveyances and comingles flows from off-site sources prior to entering the San Diego Bay. No off-site runoff is conveyed through the project site to the stormwater system. Existing site topography (informing drainage patterns) and stormwater conveyance systems are shown on the project site SWPPP Layout Figures in Attachment A of Appendix E1.

3.4.2.4 Potential Flooding

As shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map No. 06073C1911H, the project site is within an Area of Minimal Flood Hazard, Zone X (FEMA 2019). Flood Zone X is an area outside the Special Flood Hazard Area and higher than the elevation of the 0.2% annual-chance flood (FEMA 2020). The project site is not within a tsunami hazard area (DOC 2025).

3.4.3 Applicable Laws and Regulations

Federal

Clean Water Act

The Clean Water Act (CWA), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality (33 USC Section 1251 et seq.). The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The CWA establishes basic guidelines for regulating discharges of both point and non-point sources of pollutants into the waters of the United States.[1] The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and support the implementation of the CWA. Commonly relevant sections of the act are as follows:

- **Sections 303 and 304** provide for water quality standards, criteria, and guidelines. Under Section 303(d) of the CWA, the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. California is required to establish total maximum daily loads for each pollutant/stressor. A total maximum daily load defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. Once a water body is placed on the Section 303(d) List of Water Quality Limited Segments, it remains on the list until a total maximum daily load is adopted and the water quality standards are attained, or there is sufficient data to demonstrate that water quality standards have been met and delisting from the Section 303(d) list should take place.
- **Section 401 (Water Quality Certification)** indicates that a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the United States unless a Section 401 water quality certification is issued, verifying compliance with water quality requirements, or waiving such a certification. States where the discharge would originate are generally responsible for issuing water quality certifications. CWA Section 404 permits (see description below) are subject to Section 401 certification.
- **Section 402 (National Pollutant Discharge Elimination System)** establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the State Water Resources Control Board (SWRCB) and the nine RWQCBs, who have several programs that implement individual and general permits related to construction activities, stormwater runoff quality, and various kinds of non-stormwater discharges. The NPDES General Construction Permit is discussed below under state applicable laws and regulations. In general, in California, a NDPES permit also provides waste

[1] Point-source discharges are those emanating from a pipe or discrete location/process, such as an industrial process or wastewater discharge. Non-point source pollutants are those that originate from numerous diffuse sources and land uses, and which can accumulate in stormwater runoff or in groundwater.

discharge requirements, although waste discharge requirements can be issued for discharges that are not within the coverage of the Section 402 NPDES program.

The Municipal Stormwater Permitting Program under CWA Section 402 regulates stormwater discharges from municipal separate storm sewer systems (MS4s). MS4 permits are issued in two phases: Phase I, for medium and large municipalities, and Phase II for small municipalities. The Phase II Small MS4 General Permit requires the discharger to develop and implement best management practices (BMPs) through a coordinated storm water program with the goal of reducing the discharge of pollutants to the maximum extent practicable, which is the performance standard specified in CWA Section 402(p).

- Section 404 (Discharge of Dredged or Fill Material into Waters of the United States) 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 and U.S. Environmental Protection Agency.

Numerous agencies have responsibilities for administration and enforcement of the CWA. At the federal level, this includes the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, and the major federal land management agencies such as the U.S. Forest Service and Bureau of Land Management. At the state level, with the exception of tribal lands, the California Environmental Protection Agency and its sub-agencies, including the SWRCB and the nine RWQCBs, have been delegated primary responsibility for administering and enforcing certain provisions of the CWA. At the local level, the San Diego RWQCB implements and enforces the CWA, while the San Diego Unified Port District (District) (as the MS4 permittee) has implementation responsibilities for stormwater compliance within its jurisdiction.

National Flood Insurance Act

The National Flood Insurance Act of 1968 established the National Flood Insurance Program in order to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The act also required the identification of all floodplain areas within the United States and the establishment of flood-risk zones within those areas. FEMA is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing Flood Insurance Rate Maps that delineate the areas of known special flood hazards and their risk applicable to the community. The program encourages the adoption and enforcement by local communities of floodplain management ordinances that reduce flood risks. In support of the program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

Federal Antidegradation Policy

The federal Antidegradation Policy (40 CFR 131.12) requires states to develop statewide antidegradation policies and identify methods for implementing those policies. Pursuant to this policy, state antidegradation policies and implementation methods will, 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. State permitting actions must be consistent with the federal Antidegradation Policy.

State

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act established the principal California legal and regulatory framework for water quality control. The Porter–Cologne Water Quality Control Act is embodied in the California Water Code. The California Water Code authorizes SWRCB to implement the provisions of the federal CWA. The State of California is divided into nine regions governed by RWQCBs. The RWQCBs implement and enforce provisions of the California Water Code and the CWA under the oversight of SWRCB. National City is located within the purview of the San Diego RWQCB (Region 9). The Porter-Cologne Act also provides for the development and periodic review of Basin Plans that designate beneficial uses of California's major rivers and other surface waters and groundwater basins, and establish water quality objectives for those waters.

NPDES Construction General Permit

SWRCB Order WQ 2022-0057-DWQ, NPDES General Permit No. CAS000002 for Discharges of Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) was adopted on September 8, 2022.

Construction activities exceeding 1 acre (or meeting other applicable criteria) are subject to pertinent requirements under the Construction General Permit. Specific conformance requirements include implementing a SWPPP, an associated Construction Site Monitoring Program, employee training, and minimum BMPs, as well as a Rain Event Action Plan for applicable projects (e.g., those in Risk Categories 2 or 3). Under the Construction General Permit, project sites are designated as Risk Level 1 through 3 based on site-specific criteria (e.g., sediment erosion and receiving water risk), with Risk Level 3 sites requiring the most stringent controls. Based on the site-specific risk level designation, the SWPPP and related plans/efforts identify detailed measures to prevent and control the off-site discharge of pollutants in stormwater runoff. Depending on the risk level, these may include efforts such as minimizing/ stabilizing disturbed areas, mandatory use of technology-based action levels, effluent and receiving water monitoring/reporting, and advanced treatment systems. Specific pollution control measures require the use of best available technology economically achievable and/or best conventional pollutant control technology levels of treatment, with these requirements implemented through applicable BMPs.

NPDES Municipal Permit

The most current MS4 Permit for Region 9, Order No. R9-2013-0001, was adopted on May 8, 2013, by the San Diego RWQCB and became effective on June 27, 2013. This Order was amended by adoption of Order No. R9-2015-0001 on February 11, 2015, and adoption of Order No. R9 2015-0100 on November 18, 2015. This is an update to the 2007 MS4 Permit, Order No. R9-2007-0001. Updated City of San Diego Stormwater Standards (based on the co-permittees' Model BMP Design Manual) were adopted on February 16, 2016. The program would be subject to the most current MS4 Permit requirements.

The MS4 Permit implements a regional strategy for water quality and related concerns and mandates a watershed-based approach that often encompasses multiple jurisdictions. The overall permit goals include (1) providing a consistent set of requirements for all co-permittees and (2) allowing the co-permittees to focus their efforts and resources on achieving identified goals and improving water quality, rather than just completing individual actions (which may not adequately reflect identified goals). Under this approach, the co-permittees are tasked with prioritizing their individual water quality concerns, as well as providing implementation strategies and

schedules to address those priorities. MS4 Permit conformance entails considerations such as receiving water limitations, waste load allocations, and numeric water quality based effluent limitations. Specific efforts to provide permit conformance and reduce runoff and pollutant discharges to the maximum extent practicable involve methods such as (1) using jurisdictional planning efforts (e.g., discretionary general plan approvals) to provide water quality protection; (2) requiring coordination between individual jurisdictions to provide watershed based water quality protection; (3) implementing appropriate BMPs, including low impact development measures, to avoid, minimize, and/or mitigate effects such as increased erosion and off-site sediment transport (sedimentation), hydromodification,[2] and the discharge of pollutants in urban runoff; and (4) using appropriate monitoring/assessment, reporting, and enforcement efforts to ensure proper implementation, documentation, and (as appropriate) modification of permit requirements.

Local

San Diego Basin Plan

The Basin Plan is the Water Quality Control Plan for the San Diego Basin and contains the water quality objectives, policies, regulations, and implementation programs for the protection of surface and ground waters within the San Diego Region. The Basin Plan describes the beneficial uses that each water body supports and are the basis for San Diego Water Board regulatory actions. Examples of beneficial uses include drinking water supply, recreation, fishing, and protection of aquatic life. The Basin Plan is reviewed on a 3-year cycle, during which new science, new water quality problems, and new or changed laws or regulatory approaches are considered. Based on regional priorities, the Basin Plans are amended to reflect specific changes and local concerns. The San Diego Regional Board's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (1) designates beneficial uses for surface and ground waters, (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy, (3) describes implementation programs to protect the beneficial uses of all waters in the region, and (4) describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan (California Water Code Sections 13240 through 13244, and Section 13050[j]). Additionally, the Basin Plan incorporates by reference all applicable state and regional board plans and policies (SDRWQCB 2021).

San Diego Bay Watershed Quality Improvement Plan

The Municipal Stormwater Permit requires the development of watershed specific Water Quality Improvement Plan (WQIPs). This project would fall under the San Diego Bay WQIP. The purpose of the WQIP is to guide the District and other Phase I Municipalities' Jurisdictional Runoff Management Programs (JRMP) toward improving water quality in MS4 discharges and receiving waters. In the WQIP, priorities and goals are established, and each jurisdiction identified strategies to assist in attaining the goals. This approach establishes the foundation that the District uses to develop and implement its JRMP. The District implements the WQIP in collaboration with other local agencies that have jurisdiction within the San Diego Bay Watershed Management Area, which comprises three hydrologic units: Pueblo San Diego, Sweetwater River, and Otay River (San Diego Bay Responsible Parties 2016).

[2] Hydromodification is generally defined in the Municipal Permit as the change in natural watershed hydrologic processes and runoff characteristics (interception, infiltration, and overland/groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport.

San Diego Unified Port District JRMP

Under the Municipal Stormwater Permit, each jurisdiction is to prepare a JRMP, which includes a component that addresses issues related to construction activities, a component that addresses development and redevelopment, and a component that addresses issues related to existing development. Additionally, each co-permittee prepares and submits an annual report that describes the implementation of programs and strategies to reduce the discharge of pollutants of concern to the MS4 and receiving waters to the maximum extent practicable.

The District's JRMP serves as an informational document that provides an overall account of the program to be conducted by the District during the 5-year life of the Municipal Permit. The District's JRMP has been developed to meet the conditions of the Municipal Permit and to assist the District in achieving the goals identified in the WQIP. Port-specific WQIP based strategies have been incorporated into the JRMP. The JRMP program's focus is on controlling stormwater discharges to the MS4 with the overall goal of achieving receiving water quality improvements. The District has developed a list of BMPs that are applicable to all persons, activities, and operations taking place on District tidelands. The JRMP uses District-specific jurisdictional activities as well as watershed-based strategies. Enforcement of the JRMP helps to prevent stormwater pollutants from entering into the local storm drains and ultimately San Diego Bay.

The District has developed a list of pollution prevention BMPs applicable to existing facilities and construction sites on District tidelands as required by the Municipal Permit. Because pollution prevention BMPs eliminate pollutants at their source, they are a preferred means of preventing discharge of priority pollutants into the receiving waters. The list of pollution prevention BMPs includes the following:

- Keep waste containers covered or lids closed (trash).
- Minimize outdoor storage (trash, metals).
- Capture, contain, and/or treat wash water (bacteria, metals).
- Conduct employee training (bacteria, trash, metals).

In addition, Table 7-4 of the JRMP (San Diego Unified Port District 2025a) provides an extensive list of minimum BMPs for commercial and industrial facilities and construction sites. Categories of BMPs include general operations and housekeeping, non-stormwater management, waste handling and recycling, outdoor material storage, outdoor drainage from indoor activity, outdoor parking, vehicles and equipment, education and training, overwater activity, and outdoor activity and operation.

San Diego Unified Port District BMP Design Manual

The District developed and adopted a jurisdiction-specific local BMP Design Manual to address the requirement of the Municipal Permit. The District's BMP Design Manual (San Diego Unified Port District 2025b) identifies updated post-construction stormwater requirements for both tenant- and District-sponsored major maintenance or capital improvement projects as required by the Municipal Permit.

The BMP Design Manual identifies BMP requirements for both standard projects and priority development projects (PDPs) as outlined in the permit. All new development and redevelopment projects are required to implement standard source control and site design BMPs to eliminate or reduce stormwater runoff pollutants. For PDPs, the BMP Design Manual also describes pollutant control BMPs that must be incorporated into the site design and, where applicable, addresses potential hydromodification impacts from changes in flow and sediment supply.

Project applicants must submit a SWQMP accurately describing how the project would meet source control site design and pollutant control BMP requirements. District staff provides technical review of and approve SWQMP documents and drainage design plans to ensure that pollutant control BMP requirements are met. The SWQMP is evaluated for compliance with the Municipal Permit and with design criteria outlined in the District's BMP Design Manual. Once the approval process is complete, the project is able to commence, and routine inspections are conducted throughout the duration of the project construction. Upon project completion, the engineer of record must certify that the pollutant control BMPs were installed per the approved SWQMP. After installation, an approved maintenance plan (part of the SWQMP) details the maintenance inspection frequency and maintenance triggers. The proposed project is a PDP because it falls within the District's jurisdiction. Therefore, a SWQMP and treatment control BMPs are required.

San Diego Unified Port District Code, Article 10

District Code, Article 10, the District Stormwater Management and Discharge Control Ordinance, prohibits the deposit or discharge of any chemicals or waste to the tidelands or San Diego Bay and makes it unlawful to discharge pollutants directly into non-stormwater or indirectly into the stormwater conveyance system. Article 10 also requires the implementation of BMPs, stormwater plans, and other measures, as appropriate to control the discharge of pollution to tideland or receiving waters. Where enforcement is required to maintain compliance, the District will use its enforcement authority established by Article 10. The article enables the District, including District inspectors, to prohibit discharges and require BMPs so that discharges on tidelands do not cause or contribute to water quality problems. Article 10 establishes enforcement procedures to ensure that responsible dischargers are held accountable for their contributions and/or flows. The proposed project would be required to comply with District Code, Article 10.

3.4.4 Project Impact Analysis

3.4.4.1 Methodology

The impact analysis focuses on issues related to water quality. Construction-related impacts were identified and evaluated based on the physical characteristics of the project site and the magnitude, intensity, location, and duration of construction activities. The surface water hydrology impact analysis considers changes in stormwater volumes and capacity, creation of new impervious surfaces, flood hazards, and implementation of MS4 Permit stormwater pollutant control requirements.

Impacts of the proposed project on surface water quality were analyzed using available information on potential existing sources of pollution and current water quality conditions in the project area. These conditions were then compared to potential project-related sources of pollution generated by the project. The proposed project was analyzed for potential impacts on beneficial uses and water quality objectives (i.e., pollutants of concern) of San Diego Bay receiving waters. Receiving and nearby waters with CWA Section 303(d) impaired water quality were identified, along with the impairment (pollutant/stressor), and an evaluation was performed of whether the impairment would have the potential to be further affected by the proposed project.

3.4.4.2 Thresholds of Significance

The significance criteria used to evaluate the project's impacts to hydrology and water quality are based on CEQA Guidelines Appendix G. For the purposes of this project, a potentially significant impact to hydrology and water quality would occur if the proposed project would:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
3. 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:
    a. result in substantial erosion or siltation on or off site;
    b. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;
    c. 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
    d. impede or redirect flood flows.
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed in the Environmental Initial Study Checklist (Appendix A), Thresholds 2, 3, and 4 are not included in the analysis below: the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge (Threshold 2), substantially alter the existing drainage pattern of the site or area (Threshold 3), or risk release of pollutants due to project inundation (Threshold 4). These conclusions are summarized in Section 5.5, Effects Found Not to Be Significant, of this Draft EIR. Therefore, only Thresholds 1 and 5 are discussed in the impact analysis below.

3.4.4.3 Project Impacts and Mitigation Measures

Threshold 1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact Discussion

Surface Water

Construction

Project construction would involve repair or resurfacing of approximately 4 acres of existing asphalt. The retained asphalt would remain in place during construction and ground excavation activities would be limited to the repair of existing asphalt, laying of electrical conduit, battery energy storage system, photovoltaic canopy and convenience store foundations, and existing subsurface utilities modifications. Project construction would consist of installation of chargers; installation of photovoltaic canopies; installation of the battery energy storage system; construction of

the convenience store including restrooms; and infrastructure improvements including utility routing, storm drainage, and landscaping. Upon completion, the project site will feature an infiltration basin designed to manage post-construction stormwater runoff in accordance with applicable regulatory requirements.

Construction activities associated with the project could degrade water quality by increasing polluted stormwater runoff. The primary potential pollutant of concern associated with construction activity is sediment (i.e., high turbidity). San Diego Bay is listed as an impaired waterbody under CWA Section 303(d); however, it is not listed as impaired for sediment-related pollutants.

Stormwater discharges from the project site are not considered direct discharges, as water from the site travels through a series of conveyances and mixes with other runoff before entering the San Diego Bay (Appendix E1). Nevertheless, in case of heavy rain or wind conditions, during excavation or other ground-disturbing activities, erosion and sediment transport from the project site and staging areas could increase. Stormwater runoff (or wind) could carry the exposed or eroded sediments to the storm drain system or directly into San Diego Bay. If not properly controlled, potential increases in sedimentation/siltation from construction activities on the site could adversely affect water quality of receiving surface waters; namely, the San Diego Bay. In addition to sediment, other pollutants associated with construction activity could include heavy metals, arsenic, oil/grease, fuels, debris/trash from construction-related materials, and concrete curing compounds. Sediment can also be a carrier for these pollutants if they are released to soils.

As the project would disturb more than 1 acre of land, the construction contractors would be required to adhere to the NPDES Construction General Permit which mandates preparation and implementation of a SWPPP. The SWPPP shall be prepared in accordance with the District's SWPPP Template. The project's SWPPP contains construction-related BMPs from the following categories. See Appendix E1 for the full list of BMPs.

- Good Site Management "Housekeeping"
- Non-Stormwater Management
- Preserve Existing Topsoil
- Erosion Control
- Sediment Controls
- Surface Water Buffer
- Pesticide Application
- Demolition of Existing Structures
- Maintenance and Repair

In addition to the SWPPP, the project proponent would be required to implement the construction BMPs identified in the District's JRMP. The SWPPP would specify construction BMPs to ensure that water quality standards or waste discharge requirements are not violated. BMPs selected would be designed to comply with the requirements of the District's JRMP, and the Construction General Permit, and would be subject to review and approval by the District.

Implementation of the SWPPP during construction would minimize the potential for surface water quality objectives, standards, and wastewater discharge thresholds to be violated to be below a level of significance. As required by the District's regulations, the SWPPP would be prepared by a Qualified SWPPP Developer, approved by the District, and submitted to the SWRCB prior to commencement of construction activities. Through compliance with existing regulatory requirements, and the implementation of BMPs as required by the Construction General Permit, the District's JRMP, and the BMP Design Manual, the project would minimize or prevent pollutants in stormwater and authorized non-stormwater. Therefore, impacts would be **less than significant**.

Operation

The Applicant-prepared SWQMP, provided as Appendix E2, was peer reviewed by Dudek (Appendix E3). The SWQMP provides the concepts for post-construction stormwater controls. The site is mostly impervious because it is paved, and surface drainage sheet flows from west to east. The proposed design concept maintains the across-site flow to a biofiltration basin on the western edge of the project site. The proposed biofiltration basin would be sized to treat the design capture volume from an 85th percentile, 24-hour storm as described in the District's BMP design manual (see Figure 3.4-1, Construction Erosion and Sediment Control Plan, and Figure 3.4-2, Operational Drainage Control Plan). While noting technical information necessary to be added to make the SWQMP compliant with requirements, the peer review found the concepts proposed to be feasible methods to achieve compliance with the District's PDP SWQMP and BMP Design Manual. Therefore, compliance with required District's PDP SWQMP and BMP Design Manual would avoid violating any water quality standards or waste discharge requirements or otherwise substantially degrade surface and impacts would be **less than significant**.

Groundwater

Construction

During on-site grading and building construction associated with the project, hazardous materials (e.g., fuels, paints, solvents, concrete additives) could be used and therefore, would require proper management and, in some cases, disposal. The management of any resultant hazardous wastes could increase the opportunity for hazardous material releases into groundwater. However, the site is impervious, and groundwater interaction is not proposed. Compliance with all applicable federal, state, and local requirements concerning the handling, storage and disposal of hazardous waste would effectively reduce the potential for the construction of the proposed project to release contaminants into groundwater that could result in groundwater contamination or a violation of regulatory water quality standards. Therefore, construction associated with the project would not result in any substantial increase in groundwater contamination through hazardous materials releases, and impacts would be **less than significant**.

Operation

Any hazardous materials (e.g., fuels, paints, solvents) used would require proper management and, in some cases, disposal. The management of any resultant hazardous wastes could increase the opportunity for hazardous material releases into groundwater. However, the site is impervious, and groundwater interaction is not proposed. Compliance with all applicable federal, state, and local requirements concerning the handling, storage and disposal of hazardous waste would effectively reduce the potential for proposed project operations to release contaminants into groundwater that could result in groundwater contamination or a violation of regulatory water quality standards. Therefore, operation of the project would not result in any substantial increase in groundwater contamination through hazardous materials releases, and impacts would be **less than significant**.

Level of Significance Prior to Mitigation

Impacts would be **less than significant.**

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be **less than significant.**

Threshold 5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Discussion

The District's JRMP, the San Diego Bay WQIP, and the Basin Plan are the local water quality management plans that apply to the proposed project. As discussed under Threshold 1, the proposed project would comply with existing regulatory requirements, and would implement BMPs as required by the Construction General Permit, the District's JRMP, the District's PDP SWQMP, and the District BMP Design Manual to reduce or prevent runoff pollution, that would be consistent with the applicable water quality control plans. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable water quality control plan for the project site. Given the proposed project would not result in impacts on groundwater and no sustainable groundwater management plan applies to the project site, the proposed project would not conflict with a sustainable groundwater management plan, and impacts would be **less than significant**.

Level of Significance Prior to Mitigation

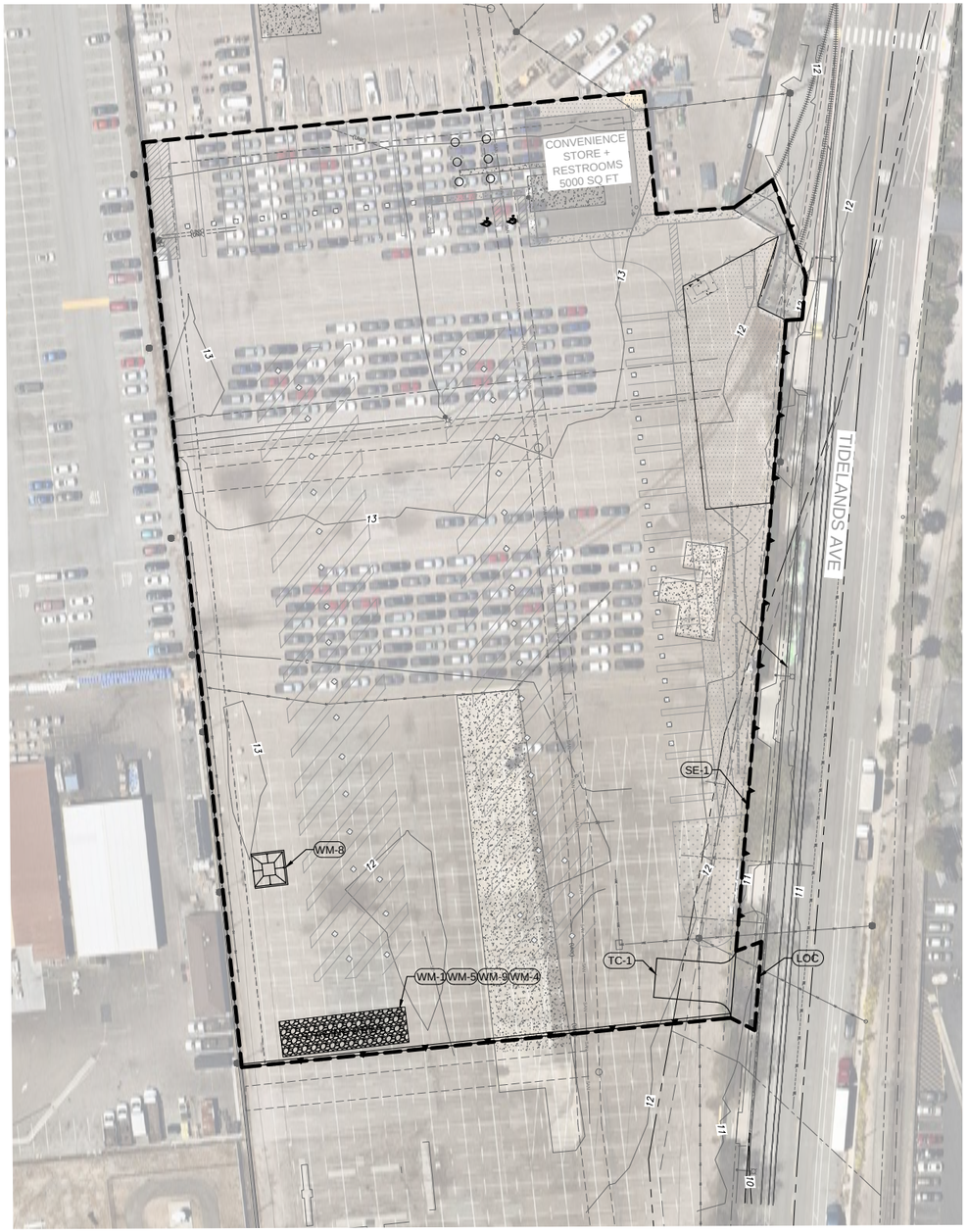
Impacts would be **less than significant.**

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be **less than significant.**



ESCP CONTRUCTION NOTES AND LEGEND:

WM-8	INSTALL CONCRETE WASH OUT PER CASQA DETAIL WM-8	
WM-1	AREA DESIGNATED FOR CONTRACTOR STAGING AND LAYDOWN AREA. MATERIAL DELIVERY TO BE HANDLED WITHIN LAYDOWN AREA PER CASQA DETAIL WM-1	
LOC	LIMITS OF CONSTRUCTION	
SE-1	CONSTRUCT SILT FENCE PER CASQA DETAIL SE-1	
TC-1	CONSTRUCT CONSTRUCTION ENTRANCE PER CASQA DETAIL TC-1	
WM-5	SOLID WASTE MANAGMENT LOCATION PER CASQA WM-5 DETAIL. SIZE=STANDARD TRAILER SIZE. CONTRACTOR TO LOCATE ON SITE AS NECESSARY FOR CONSTRUCTION	
WM-4	SPILL PREVENTION AND CONTROL IN STAGING AREA PER CASQA WM-4 DETAIL. SIZE TO BE 10X10. CONTRACTOR TO LOCATE ON SITE AS NECESSARY FOR CONSTRUCTION SEQUENCING.	
WM-9	CONTRACTOR TO PROVIDE PORTABLE RESTROOMS PER CASQA WM-9	

NORTH

EROSION AND SEDIMENT CONTROL PLAN

0 20' 40' 80'

SCALE IN FEET

SOURCE: Burns & McDoonnell 2025

FIGURE 3.4-1

Construction Erosion and Sediment Control Plan

Tidelands Avenue Electric Truck Hub

DUDEK

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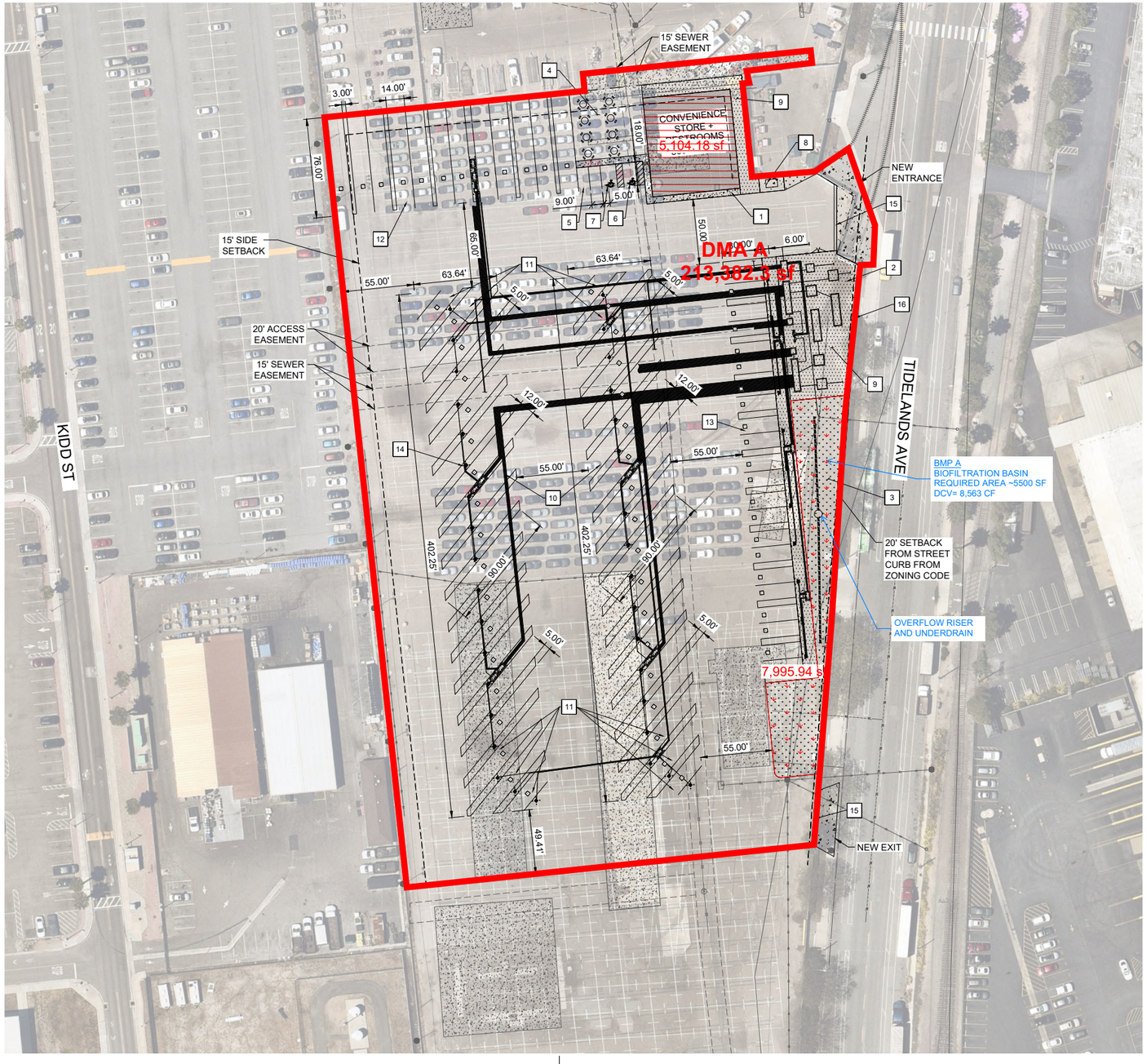


NORTH

OVERALL SITE PLAN

0 20' 40' 80'

SCALE IN FEET

NOTES

1. THE EXISTING INFORMATION SHOWN ARE PER RECORD DRAWINGS AND DRAWN TO THE CLOSEST ACCURACY AND WITHOUT ANY HORIZONTAL CONTROL

LEGEND AND ABBREVIATIONS

- EXISTING WATER LINE
- EXISTING OVERHEAD ELECTRICAL LINE
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING SANITARY SEWER LINE
- EXISTING RAIL SPUR
- EASEMENT
- EXISTING UTILITY POLE
- EXISTING SANITARY MANHOLE
- EX — EXISTING WATER LINE
- LEASE LIMIT LINE
- CHAINLINK FENCE
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT/SIDEWALK
- VEGETATED AREA
- BUILDING
- ELECTRICAL CONDUIT

CONSTRUCTION NOTES #

1 CONCRETE SIDEWALK

2 ELECTRICAL EQUIPMENT YARD

3 LANDSCAPING/BIO FILTRATION BASIN WITH MEDIA AND UNDERDRAIN FOR STORMWATER TREATMENT

4 PICNIC AREA

5 90° PARKING SPACE

6 ACCESSIBLE PARKING SPACE

7 VAN ACCESSIBLE PARKING SPACE

8 9'x6' DUMPSTER AND DUMPSTER PAD

9 ASPHALT PAVEMENT

10 PULL THROUGH TRUCK+TRAILER PARKING SPACES (26 TYP.)

11 PULL THROUGH TRUCK ONLY PARKING SPACES (10 TYP.)

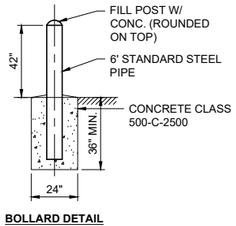
12 OVERNIGHT TRUCK+TRAILER PARKING SPACES (12 TYP.)

13 OVERNIGHT TRUCK ONLY PARKING SPACES (22 TYP.)

14 BOLLARD (TYP)

15 24' WIDE SLIDING GATE

16 CHAINLINK FENCE WITH GATE



BOLLARD DETAIL

SOURCE: Burns & McDoonnell 2025

FIGURE 3.4-2

Operational Drainage Control Plan

Tidelands Avenue Electric Truck Hub

DUDEK

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3.5 Noise

3.5.1 Overview

This section describes the existing noise and vibration conditions of the proposed Tidelands Avenue Electric Truck Hub Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. Additional detail is provided in the technical Noise memorandum provided as Appendix F to this Draft Environmental Impact Report (EIR), as well as attachments thereto.

3.5.1.1 Noise Fundamentals

Sound, Noise, and Acoustics

Sound is a process that consists of three components: the sound source, sound path, and sound receiver. All three components must be present for sound to exist. Without a source to produce sound, there is no sound. Similarly, without a medium to transmit sound pressure waves, there is no sound. Finally, sound must be received; a hearing organ, sensor, or object must be present to perceive, register, or be affected by sound or noise. In most situations, there are many different sound sources, paths, and receptors rather than just one of each. Acoustics is the field of science that deals with the production, propagation, reception, effects, and control of sound. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired.

Sound Pressure Levels and Decibels

The amplitude of a sound determines its loudness. Loudness of sound increases with increasing amplitude. Sound pressure amplitude is measured in units of micronewton per square meter, also called micropascal. One micropascal is approximately one-hundred billionth (0.00000000001) of normal atmospheric pressure. The pressure of a very loud sound may be 200 million micropascals, or 10 million times the pressure of the weakest audible sound. Because expressing sound levels in terms of micropascal would be very cumbersome, sound pressure level in logarithmic units is used instead to describe the ratio of actual sound pressure to a reference pressure squared. These units are called Bels. To provide a finer resolution, a Bel is subdivided into 10 decibels (dB).

A-Weighted Sound Level

Sound pressure level alone is not a reliable indicator of loudness. The frequency, or pitch, of a sound also has a substantial effect on how humans will respond. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness, or human response, is determined by the characteristics of the human ear.

Human hearing is limited not only in the range of audible frequencies, but also in the way it perceives the sound in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 and 5,000 hertz, and it perceives a sound within that range as more intense than a sound of higher or lower frequency with the same magnitude. To approximate the frequency response of the human ear, a series of sound level adjustments is usually applied to the sound measured by a sound level meter. The adjustments (referred to as a weighting network) are frequency dependent.

The A-scale weighting network approximates the frequency response of the average young ear when listening to ordinary sounds. When people make judgments about the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special situations (e.g., B-scale, C-scale, D-scale), but these scales are rarely used in conjunction with most environmental noise. For a development like the project, noise levels are reported in terms of A-weighted sound levels. All sound levels discussed in this report are A-weighted decibels (dBA). Examples of typical noise levels for common indoor and outdoor activities are depicted in Table 3.5-1.

Table 3.5-1. Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
—	110	Rock band
Jet fly over at 300 meters (1,000 feet)	100	—
Gas lawn mower at 1 meter (3 feet)	90	—
Diesel truck at 15 meters (50 feet), at 80 kilometers per hour (50 miles per hour)	80	Food blender at 1 meter (3 feet); garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime; gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area; heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban, daytime	50	Large business office; dishwasher next room
Quiet urban, nighttime	40	Theater; large conference room (background)
Quiet suburban, nighttime	30	Library
Quiet rural, nighttime	20	Bedroom at night; concert hall (background)
—	10	Broadcast/Recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2020.

Human Response to Changes in Noise Levels

The average healthy ear can barely perceive noise level changes of 3 dBA. A change of 5 dBA is readily perceptible, and a change of 10 dBA is *perceived* as twice (if a gain) or half (if a loss) as loud. A doubling of sound energy results in a 3 dBA increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in sound level.

Noise Descriptors

Units of measure have been developed to evaluate the long-term characteristics of sound. The energy-equivalent sound level (L_{eq}) is also referred to as the time-average sound level. It is the equivalent steady-state or constant sound level that in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same time period. For instance, the 1-hour A-weighted equivalent sound level, $L_{eq(h)}$, is the energy average of the A-weighted sound levels occurring during a 1-hour period, and is the basis for the City "general sound level limits" standards.

People are generally more sensitive to and thus potentially more annoyed by noise occurring during the evening and nighttime hours. Hence, another noise descriptor used in community noise assessments—the community noise equivalent level—represents a time-weighted, 24-hour average noise level based on the A-weighted sound level. However, unlike an unmodified 24-hour L_{eq} value, the community noise equivalent level descriptor accounts for increased noise sensitivity during the evening (7:00 p.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) by adding 5 dBA and 10 dBA, respectively, to the average sound levels occurring during these defined hours within a 24-hour period.

Sound Propagation

Sound propagation (how sound travels from a noise emission source to a receiver location) is influenced by multiple factors that include geometric spreading, ground absorption, atmospheric effects, and occlusion by natural terrain and/or features of the built environment.

Sound levels attenuate (or diminish) geometrically at a rate of approximately 6 dBA per doubling of distance from an outdoor point-type source due to the spherical spreading of sound energy with increasing distance traveled. The effects of atmospheric conditions such as humidity, temperature, and wind gradients are typically distance–dependent and can also temporarily either increase or decrease sound levels measured or perceived at a receptor location. In general, the greater the distance the receiver is from the source of sound emission, the greater the potential for variation in sound levels at the receptor due to these atmospheric effects. Additional attenuation can result from sound path occlusion and diffraction due to intervention of natural features (e.g., ridgelines, dense forests) and built features (such as solid walls, buildings, and other structures).

3.5.1.2 Vibration Fundamentals

Groundborne vibration is fluctuating or oscillatory motion transmitted through the ground mass (i.e., soils, clays, and rock strata). The strength of groundborne vibration attenuates rapidly over distance. Some soil types transmit vibration quite efficiently; other types (primarily sandy soils) do not. Several basic measurement units are commonly used to describe the intensity of ground vibration. The descriptors used by the Federal Transit Administration are peak particle velocity (PPV), in units of inches per second (ips), and velocity decibel (VdB) that is based on a root-mean square of the vibration signal magnitude. The calculation to determine PPV at a given distance is as follows:

$$PPV_{distance} = PPV_{ref} * (25/D)^{1.5}$$

Where:

$PPV_{distance}$ = the peak particle velocity in inches per second of the equipment adjusted for distance
PPV_{ref} = the reference vibration level in inches per second at 25 feet
D = the distance from the equipment to the receiver

3.5.2 Existing Conditions

Fundamentals of Noise and Vibration

Although the terms may be used interchangeably in the right context, “sound” is defined as any gas or fluid pressure variation detected by the human ear, and “noise” is unwanted sound. The preferred unit for measuring sound is the decibel (dB), which expresses the ratio of sound pressures to a reference value logarithmically, enabling a wide

range of audible sound to be evaluated and discussed conveniently. On the low end of this range, 0 dB is not the absence of sound energy, but instead corresponds approximately to the threshold of average healthy human hearing; on the upper end, 120–140 dB corresponds to an average person's threshold of pain (Caltrans 2013).

The human ear is not equally responsive to all frequencies of the audible sound spectrum. An electronic filter is normally used when taking sound measurements that de-emphasizes certain frequencies in a manner that mimics the human ear's response to sound; this method is referred to as A-weighting. Sound levels expressed under the A–weighted system are sometimes designated as dBA. All sound levels discussed in this report are A-weighted.

The equivalent continuous sound level (L_{eq}) is a single dB value which, if held constant during the specified time period, would represent the same total acoustical energy of a fluctuating noise level over that same time period. L_{eq} values are commonly expressed for periods of 1 hour, but longer or shorter time periods may be specified. Another descriptor is maximum sound level, which is the greatest sound level measured during a designated time interval or event. The minimum sound level is the lowest measured level and often called the floor of a measurement period. Percentile-exceed sound levels (L_{xx}) represent the sound level exceeded for a cumulative percentage of a specified period; for example, L_{90} is the sound level exceeded 90% of the time.

Environmental Setting

The project is located within an industrial area. The nearest noise-sensitive receptor locations are multi-family homes located along McKinley Avenue (near W. 18th Street) about 1,250 feet east of the site, and single-family homes situated about 2,000 feet to the east across Interstate 5.

On August 13, 2025, three short-term (ST) sound pressure level measurements were performed at locations selected within the vicinity of the project to quantify and characterize the representative existing outdoor ambient noise environment of the area. These locations are depicted as ST1—ST3 in Figure 3.5-1. Additionally, traffic counts were taken at ST3, measured 75 feet west of Tidelands Avenue, to quantify existing traffic volumes and noise levels. The measured L_{eq}, L_{min}, L_{max}, L_{10}, L_{50}, and L_{90} sound levels at the ST locations are provided in Table 3.5-2.

Table 3.5-2. Measured Baseline Outdoor Ambient Sound Pressure Levels

Site Position Tag	Date (yyyy-mm-dd), Time (hh:mm)	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)	L_{10} (dBA)	L_{50} (dBA)	L_{90} (dBA)
ST1	2025-08-13, 09:40 a.m. to 09:55 a.m.	47	43	64	46	46	46
ST2	2025-08-13, 10:32 a.m. to 10:47 a.m.	51	46	65	50	50	49
ST3	2025-08-13, 11:25 a.m. to 11:40 a.m.	60	46	76	60	51	48

Notes: L_{eq}= equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; L_{min} = minimum sound level during the measurement interval; L_{10}= sound level exceeded 10% of the time; L_{50}= sound level exceeded 50% of the time; L_{90}= sound level exceeded 90% of the time; dBA = A-weighted decibels; ST = short-term noise measurement locations.

As shown in Table 3.5-2, the measured sound pressure level ranged from approximately 47 dBA L_{eq} at ST1 to 51 dBA L_{eq} at ST2. The primary noise sources at ST1 and ST2 consisted of traffic along adjacent roadways (i.e., Kidd Street), military aircraft noise, dog barks, and distant U.S. Navy ship building/maintenance activities. Table 3.5-3 presents the measured sound pressure level range of these primary sound sources observed and noted by a

Dudek investigator at the time of the attended measurements. These primary sources were measured intentionally at the distances indicated in Table 3.5-3 and separate from measurements ST1—ST3.

Table 3.5-3. Primary Noise Source Measured Sound Pressure Levels

Observed Noise Source	Approximate Distance (feet)	L_{eq} Range (dBA)	L_{max} (dBA)
Speaker	500	50—54	57
HVAC/fan	600	46—47	49
Backup alarms	100	50—62	62
Ship building/maintenance	>1,000	46—52	52
Dog barks	50	51—68	68
Helicopter	>1,000	53—63	63

Notes: L_{eq}= equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; dBA = A-weighted decibels.

Additionally, one long-term (LT) sound level measurement location, LT1, was selected for unattended sound level monitor deployment to quantify and characterize the daytime, evening, and nighttime baseline outdoor ambient sound levels southwest of the project site (see Figure 3.5-1) over a full 24-hour cycle, totaling 1,440 consecutive minutes in duration. Table 3.5-4 presents the measured range of L_{eq}, L_{min}, L_{max}, L_{10}, L_{50}, and L_{90} sound levels during daytime, evening, and nighttime hours, and Exhibit B shows a plot derived from the LT1 measurement data.

As shown in Table 3.5-4, the measured sound level range for each metric during daytime hours was consistent with the short-term measurements (ST1—ST2) presented in Table 3.5-2. The lowest hourly average (L_{eq}) value (42 dBA) was measured from 1:00 a.m. to 2:00 a.m., and the highest (64 dBA) was measured from 7:00 p.m. to 8:00 p.m.

Table 3.5-4. LT1 Sound Pressure Level Measurement Results

Time	Sound Level Range (dBA)					
	L_{eq}	L_{min}	L_{max}	L_{10}	L_{50}	L_{90}
Daytime (7:00 a.m. to 7:00 p.m.)	48—54	43—46	61—81	50—58	47—52	45—49
Evening (7:00 p.m. to 10:00 p.m.)	44—64	42—43	65—90	45—58	43—50	43—45
Nighttime (10:00 p.m. to 7:00 a.m.)	42—59	40—44	52—87	42—58	41—53	41—49

Notes: L_{eq}= equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; L_{min} = minimum sound level during the measurement interval; L_{10}= sound level exceeded 10% of the time; L_{50}= sound level exceeded 50% of the time; L_{90}= sound level exceeded 90% of the time; dBA = A-weighted decibels; LT = long-term noise measurement location.

3.5.3 Applicable Laws and Regulations

The District does not have its own noise or vibration standards and does not currently maintain formal impact thresholds for assessing potential impacts under the California Environmental Quality Act (CEQA). The sections below discuss various laws, regulations, and policies that may apply to the proposed project or otherwise be useful in developing thresholds of impact for the proposed project.

Federal

Federal Interagency Committee on Noise Administration

Some guidance regarding the determination of a substantial permanent increase in ambient noise levels in the project vicinity above existing levels is provided by the 1992 findings of the Federal Interagency Committee on Noise (FICON) (FICON 1992), which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON recommendations are based upon studies that relate aircraft and traffic noise levels to the percentage of people highly annoyed by the noise. Annoyance is a qualitative measure of the adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

The rationale for the FICON recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of L_{dn}. The changes in noise exposure that are shown below are expected to result in equal changes in annoyance at sensitive land uses. Although the FICON recommendations were specifically developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to all transportation noise sources and permanent non-transportation noise sources.

- Outdoor ambient sound level without the project is less than 60 dBA L_{dn}, then a project-attributed increase of 5 dBA or more would be considered significant;
- Outdoor ambient sound level without the project is between 60 dBA and 65 dBA L_{dn}, project-attributed increase of 3 dBA or more would be considered significant; and
- Outdoor ambient sound level without the project is greater than 65 dBA L_{dn}, then project-attributed increase of 1.5 dBA or more would be considered significant.

State

California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual (Caltrans 2020), Caltrans provides guidelines to assess the potential damage from ground vibration induced by construction equipment. These thresholds are presented in Tables 3.5-5 and 3.5-6.

Table 3.5-5. Caltrans Guidelines for Vibration Damage Potential

Structure and Condition	Maximum PPV, in/sec	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/ commercial buildings	2.0	0.5

Source: Caltrans 2020.
Notes: PPV = Peak particle velocity.
Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 3.5-6. Caltrans Guidelines for Annoyance

Human Response	Maximum PPV, in/sec	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.10
Severe	2.0	0.4

Source: Caltrans 2020.
Notes: PPV = Peak particle velocity.
Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Local

National City Municipal Code Section 12.06.040

Section 12.06.040 of National City's Municipal Code establishes exterior noise level limits given in Table 3.5-7 at any location in National City on or beyond the boundaries of the property on which the noise is produced. Where two or more dissimilar land uses occur on a single property, the more restrictive noise limits shall apply.

Table 3.5-7. National City Exterior Environmental Noise Limits

Receiving Land Use Category	Allowable Noise Level (dBA 1-hour Leq)	
	10:00 p.m. to 7:00 a.m.	7:00 a.m. to 10:00 p.m.
All residential (less than 9 dwelling units)	45	55
Multi-unit residential (Consisting of 9 dwelling units or more and Public Space)	50	60
Commercial	60	65
Light Industry (Industry east of I-5)	70	70
Heavy Industry (Industry west of I-5)	80	80

Notes: Corrections to the exterior noise level limits:

- If the noise is continuous, the L_{eq} for any hour can be represented by any lesser time period within that hour. Noise measurements of a few minutes only will thus suffice to define the noise level.
- If the noise is intermittent, the L_{eq} for any hour may be represented by a time period typical of the operating cycle. Measurement should be made of a representative number of noisy/quiet periods. A measurement period of not less than fifteen minutes is, however, strongly recommended when dealing with intermittent noise.
- In the event the alleged offensive noise contains a steady, audible sound such as a whine, screech or hum, or contains a repetitive impulsive noise such as hammering or riveting, or contains music or speech, the standard limits shall be reduced by 5 dB.
- If the measured ambient level exceeds that permissible, the allowable noise level standard shall be the ambient noise level. The ambient level shall be measured when the alleged noise violation source is not operating.

National City Municipal Code Section 12.10.160

Section 12.10.160 of National City's Municipal Code addresses construction noise restrictions. Construction activity is prohibited between the hours of 7:00 p.m. and 7:00 a.m. during weekday hours, or at any time on weekends or holidays, where the noise would create a disturbance across a residential or commercial property line. For construction lasting less than 10 days, or when "mobile" construction equipment is in use, the daytime (i.e., between 7:00 a.m. and 7:00 p.m.) limit for noise exposure at Type I areas (i.e., residential properties) affected by

the construction noise is 75 dBA, or 85 dBA at Type II areas (i.e., semi-residential/commercial properties). For construction lasting longer than 10 days, or when "stationary" construction equipment is in use, the daytime limit for noise exposure at Type I areas (i.e., residential properties) affected by the construction noise is 60 dBA, or 70 dBA at Type II areas (i.e., semi-residential/commercial properties) (City of National City 2001).

National City Municipal Code Section 12.10.180

With respect to durable sources of groundborne vibration, Section 12.1.180 specifies that operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way, is prohibited.

This standard would be applicable to operational sources of groundborne vibration. National City does not contain any limits on groundborne vibration relevant to construction activities.

3.5.4 Project Impact Analysis

3.5.4.1 Methodology

Construction Noise

Construction activities include temporary noise sources with emission levels varying from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor. Construction noise modeling was performed using a Microsoft Excel–based noise prediction model. Input variables include the equipment type (backhoe, crane, truck, etc.), the number of pieces of equipment, the duty cycle for each piece of equipment (i.e., percentage of each hour the equipment typically works), and the distance from the sensitive receptor. Sound source information was obtained from the Noise Source Database developed under National Cooperative Highway Research Program 25-49 (NCHRP 25-49), Development of a Highway Construction Noise Prediction Model (NASEM 2022).

The Noise Technical Memo prepared for the project (Appendix F) includes a list of the sound levels generated by various powered equipment that could be associated with construction of the project, measured at a distance of 50 feet using a "slow" response time constant (1 second). Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time (Table 3.5-8).

Table 3.5-8. Sound Levels of Typical Construction Equipment

Equipment	Maximum Sound Level (dBA L_{max}) – 50 feet from Source
Air Compressor	67
Aerial Lift (Man Lift)	73
Backhoe	84
Compactor (Plate)	75
Compactor (Roller)	83
Concrete Mixer	82
Concrete Saw	88

Table 3.5-8. Sound Levels of Typical Construction Equipment

Equipment	Maximum Sound Level (dBA L_{max}) – 50 feet from Source
Crane, Mobile	76
Dozer	86
Forklift	88
Generator	68
Grader	79
Horizontal Bore Drill	88
Loader	81
Paving – Asphalt	83
Paving – Concrete	88
Pump	74
Scraper	92
Flatbed Truck	74
Welding Machine	72

Source: NASEM 2022.
Notes: dBA = A-weighted decibel; L_{max} = maximum instantaneous noise level.

Construction Vibration

Construction activity can result in varying degrees of ground vibration at local receptors, depending on the equipment and methods used, distance to the affected structures, and soil type. Caltrans has been assembling data for groundborne vibration levels generated by heavy construction equipment operation during the building of transportation projects for many years. The vibration levels from use of such equipment are representative for other types of construction efforts, not just transportation projects, and are therefore widely employed to assess vibration levels from heavy equipment use for any effort. According to Caltrans (2020), the most important equipment relative to generation of vibration, and the vibration levels produced by such equipment, is illustrated in Table 3.5-9. Pile driving, which can generate higher groundborne vibration levels than other construction equipment is not proposed as a method of construction.

Table 3.5-9. Vibration Velocities for Typical Construction Equipment

Equipment	PPV at 25 Feet (Inches Per Second)
Vibratory Roller	0.210
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

Source: Caltrans 2020.
Note: PPV = peak particle velocity; VdB = vibration decibel.

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in Caltrans guidance (Caltrans 2020).

The following equation is used to calculate PPV at any distance of interest from the operating construction equipment:

$$PPV_{rcvr} = PPV_{ref} * (25/D)^{1.1}$$

In the above equation, PPV_{rcvr} is the predicted vibration velocity at the receiver position, PPV_{ref} is the reference value at 25 feet from the vibration source, and D is the actual horizontal distance to the receiver.

3.5.4.2 Thresholds of Significance

The significance criteria used to evaluate the project's impacts to noise are based on CEQA Guidelines Appendix G. For the purposes of this project, a potentially significant impact to noise would occur if the proposed project would result in:

1. 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 in other applicable local, state, or federal standards?
2. Generation of excessive groundborne vibration or groundborne noise levels?
3. 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 2 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?

As discussed in the Environmental Initial Study Checklist (Appendix A), Threshold 3 is not included in the analysis below as it was determined that the proposed project would not result in significant impacts related to excessive noise levels associated with a public airport or public use airport. This conclusion is summarized in Section 5.5, Effects Found Not to Be Significant, of this Draft EIR. Therefore, only Thresholds 1 and 2 are discussed in the impact analysis below.

3.5.4.3 Project Impacts and Mitigation Measures

Threshold 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 in other applicable local, state, or federal standards?

Construction Noise Impact Discussion

Construction would occur during National City's allowable hours (7:00 a.m. to 7:00 p.m. on non-holidays). Construction activities include temporary noise sources with emission levels varying from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor.

Section 12.10.160 of National City's Municipal Code limits construction noise at Type I areas (i.e., residential) and Type II areas (i.e., semi-residential/commercial). The studied noise-sensitive residences are located approximately 1,250 feet to the east along W. 18th Street, and while located in a Type II area per National City's Land Use Map, the following analysis conservatively compares the predicted project construction noise levels at the nearest residences against National City's Type I area threshold (City of National City 2024). Construction noise exposure at Type I areas is limited to 75 dBA $L_{eq\text{-}1hr}$ for construction less than 10 days, or when "mobile" construction

equipment is in use; for construction lasting longer than 10 days, or when "stationary" construction equipment is in use, construction noise is limited 60 dBA $L_{eq\text{-}1hr}$.

Noise emissions from project construction were calculated at the nearest residences, located about 1,250 feet to the east of the project site's property lines, and in closer proximity to the project site at about 250 feet to the southwest. As described in Section 3.5.6.1, calculations were based upon information provided by the Applicant and on the distance between the closest project construction boundary and this use for each construction phase.

The anticipated equipment to be used for construction of the project is shown in Table 3.5-10 for each phase of project construction. With the construction equipment identified in Table 3.5-10, an analysis was performed with a Microsoft Excel–based noise prediction model using the reference data shown in Table 3.5-8. Input variables include the equipment type (backhoe, crane, truck, etc.), the number of equipment pieces, the duty cycle for each piece of equipment (i.e., percentage of each hour the equipment typically works), and the distance from the sensitive receptor. Aggregate sound emissions from project construction activities, broken down by sequential phase of construction, were predicted for the worst-case construction activity occurring along the closest construction boundary to residences (Appendix F). The results are summarized in Table 3.5-10. Calculations do not take into account shielding provided by intervening structures or topography.

Table 3.5-10. Construction Noise Levels, Worst-Case L_{eq}

Construction Phase	Equipment Type	A-Weighted Sound Level (dBA) at Nearest Noise-Sensitive Receptor	
		Residences (1,250 Feet)	
		Mobile Equipment	Stationary Equipment
Building Construction	Crane (2), forklift (3), generator set (2), loaders (2), welders (6)	68	51
Paving	Paving equipment (2), pavers (2), rollers (2)	68	N/A
Architectural Coating	Air compressor (1)	N/A	32
Trenching	Trencher (1), loader (1), roller (1)	56	N/A

Source: Appendix F.
Notes: L_{eq} = average noise level equivalent; dBA = A-weighted decibel; N/A = not applicable.

As shown in Table 3.5-10, construction noise levels at the closest residences (1,250 feet from the site boundary construction) would range from 56 to 68 dBA $L_{eq\text{-}1hr}$ for mobile equipment and 32 to 51 dBA $L_{eq\text{-}1hr}$ for stationary equipment, without taking into account the substantial shielding provided by intervening structures. These construction noise levels would be below National City's construction noise limits of 75 dBA $L_{eq\text{-}1hr}$ for mobile equipment and 60 dBA $L_{eq\text{-}1hr}$ for stationary equipment.

Operational Noise Impact Discussion

The project site is currently used primarily for parking. The project proposes the construction of a drayage truck stop consisting of 70 electric vehicle charging positions, electrical infrastructure for the chargers, carport solar, a convenience store/restrooms, and a battery energy storage system (BESS). The project will also include structural improvements to the existing electric, water, and sewer utility services at the project site.

New major continuous-type noise generating components of the project would include the 70 electric vehicle chargers (assumed to be 80 dBA sound power level each), located on the northern half of the site; heating, ventilation, and air conditioning (HVAC) units associated with the convenient store (59 dBA), located in the northeastern corner of the site; and the two BESS units (85 dBA each), located in the northeastern portion of the site. For a conservative analysis, all operational sound sources were assumed to be operating continuously 24 hours/day and shielding from intervening structures, buildings, or topography was not included in the calculations. At the nearest residences located 1,250 feet northeast of the site, the operational sound level would be about 38 dBA, which would be below National City's daytime (55 dBA) and nighttime (45 dBA) noise limits for multi-unit residential uses, including the 5 dB reduction (see Table 3.5-7) and would not be anticipated to be distinguishable from other background noise sources. These predicted operation noise levels are also expected to be lower than the existing outdoor ambient sound environment at such locations within 200 horizontal feet of an interstate highway, which Federal Transit Administration guidance would estimate as 55 dBA at night (FTA 2018). Therefore, the anticipated increase in outdoor ambient noise attributed to project on-site operations would be less than 1 dB and consequently compatible with the FICON criteria.

Based on the Department of the Navy Military Working Dog Program OPNAVINST 5585.2C, average sound levels at the dog kennels should not exceed 75 dB for any 24-hour period (Department of the Navy 2012) (see Appendix F, Attachment C). Additionally, guidance provided by a Veterinary Medical Officer at the Marine Corps Air Station (MCAS) Miramar Veterinary Treatment Facility (see Appendix F, Attachment B) recommended sound exposure at the kennels not to exceed a continuous noise level of 45 dBA (i.e., 45 dBA L_{eq}) and maximum noise level of 60 dBA (i.e., 60 dBA L_{max}) during sleeping hours (8:00 p.m. to 4:00 a.m.), or a continuous noise limit of 55 dBA L_{eq} and maximum noise limit of 70 dBA L_{max} for waking hours (4:00 a.m. to 8:00 p.m.). For informational purposes, the operational sound level would be about 48 dBA at the exterior of the kennels, which would be below the daytime noise limits provided by the Veterinary Medical Officer at the MCAS Miramar Veterinary Treatment Facility, below background levels at this location except during the quietest nighttime hours (hourly average [L_{eq}] value [42 dBA] was measured from 1:00 a.m. to 2:00 a.m) and below the sound levels generated by other sound sources in the area (see Table 3.5-2).

During sleeping hours, the dogs are inside within a partially enclosed area. Sound level inside this sleeping area would be anticipated to be approximately 10 dB lower than at the exterior of the kennel due to the noise reduction provided by the partially enclosed building envelope, referencing data for "open" window conditions from Table 7 of the FHWA's Highway Traffic Noise: Analysis and Abatement Guidance document (FHWA 2011). Thus, the resulting project operational noise exposure to the dog kennels would be approximately 38 dBA, which would be lower than the nighttime noise limits provided by the Veterinary Medical Officer at the MCAS Miramar Veterinary Treatment Facility.

Level of Significance Prior to Mitigation

Project construction and operations would result in noise levels that would meet the applicable significance thresholds. Construction and operational noise impacts of the project would therefore be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be **less than significant**.

Threshold 2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction Vibration Impact Discussion

National City does not have vibration thresholds that would be applicable to construction of the project. To ensure that project construction does not result in structural damage to nearby buildings, it is appropriate to employ a numeric standard adopted by another agency. The California Department of Transportation (Caltrans 2020) establishes a construction-related damage limit of 0.25 in/sec PPV for historic and old buildings, 0.3 in/sec PPV for older residential structures, and 0.5 in/sec PPV for new residential and modern commercial/industrial structures. The applicable threshold for project-attributed construction vibration would be 0.3 in/sec PPV at the closest residences. The closest residential structures are located as close as 1,250 feet to the east and the closest industrial building is located about 40 feet to the west.

At the nearest industrial building (40 feet), construction vibration levels would be 0.13 in/sec PPV or less and well below the industrial threshold for structural damage of 0.5 in/sec PPV. At the nearest residences (1,250 feet) and at the closest measurement location (250 feet), construction vibration levels would be below 0.02 in/sec PPV. These levels would be well below the residential threshold of 0.3 in/sec PPV, and below the level considered distinctly perceptible by humans of 0.04 in/sec PPV.

Level of Significance Prior to Mitigation

Project construction would result in groundborne vibration levels that would meet the applicable significance thresholds. Groundborne vibration impacts of the project would therefore be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be **less than significant**.

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SOURCE: Maxar 2025; Open Street Map 2025

DUDEK

0 180 360 Feet

FIGURE 3.5-1

Noise Sensitive Receptors

Tidelands Avenue Electric Truck Hub

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3.6 Transportation

3.6.1 Overview

This section describes the existing transportation conditions of the proposed Tidelands Avenue Electric Truck Hub Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

The transportation impact analysis presented in this section is based primarily on the Mobility Analysis Study for the Tidelands Avenue Electric Truck Hub Project, San Diego Unified Port District (Mobility Analysis) prepared by Dudek (Appendix G).

3.6.2 Existing Conditions

This section describes existing conditions near the proposed project. Characteristics are provided for the existing circulation system including roadway, transit, bike and pedestrian conditions.

3.6.2.1 Roadway Network

Direct access to the project is provided by Tidelands Avenue north of its intersection with 19th Street.

Tidelands Avenue. The functional classification of Tidelands Avenue is a Collector (per Figure T-6 of the National City Transportation Element [City of National City 2024a]) between Civic Center Drive and 32nd Street. Near the project, the roadway has one lane in each direction and is divided with a painted yellow striping along the segment. As part of the Bayshore Bikeway, there is a buffered Class II bicycle lane along either side of Tidelands Avenue. The posted speed limit is 35 miles per hour (mph). Parking is allowed on both sides of Tidelands Avenue.

19th Street. The functional classification of 19th Street is a Collector Street (per Figure T-6 of the National City Transportation Element [City of National City 2024a]). 19th Street has two travel lanes in each direction between Kidd Street near Gate 13 and Cleveland Avenue. East of Cleveland Avenue and under Interstate 5 (I-5), 19th Street transitions into a two-lane roadway which terminates at 18th Street. The posted speed limit is 30 mph. Parking is not allowed along 19th Street and there are no bike facilities.

3.6.2.2 Truck Route

The demand for truck movements is primarily driven by the Port of San Diego, Naval Base San Diego, and the shipyards. These facilities serve as key origins and destinations for truck freight (San Diego Unified Port District 2020). There are two designated truck routes: one truck route runs along Harbor Drive, then connects to adjacent freeways I-5 and I- 15 via 28th or 32nd Streets in the City of San Diego or 8th Street in the City of National City, and the other truck route runs along Tidelands Avenue between 24th Street and Civic Center. The truck route along Harbor Drive is a right-of-way (ROW) controlled by the City of San Diego and the truck route along Tidelands Avenue is a ROW controlled by the City of National City (see Figure 3.6-1, Truck Routes). Because the proposed project will prioritize trucks that frequent the District's two marine cargo terminals, it is anticipated the trucks using the charging facility will use the designated truck routes to access the project site and marine terminals. As can be seen on Figure 3.6-1, the most direct route to the marine cargo terminals and freeway network to and from the project site is via the designated truck routes. Electric trucks associated with or using the proposed project charging, whether

for overnight or opportunity charging, that are not using the designated truck routes would presumably be delivering cargo to a destination with National City or the City of San Diego and not simply driving through residential streets that do not have the geometric design to accommodate heavy-duty trucks and trailers.

3.6.2.3 Bike and Pedestrian Facilities

The bicycle network is anchored by one major north–south route connected to an array of existing and planned east–west facilities. Harbor Drive is the primary north–south corridor and part of the Bayshore Bikeway, a 24-mile path around San Diego Bay being implemented in phases by SANDAG (San Diego Unified Port District 2020). The Bayshore Bikeway is a regional bicycle route that encircles San Diego Bay and passes through the National City Bayfront: Planning District 5 of the PMP along Harbor Drive and Tidelands Avenue and provides a link to the nearby cities of San Diego, Coronado, Imperial Beach, and Chula Vista. This route also provides an alternative transportation option to many industrial and military job sites. The National City Segment for this bikeway from Civic Center Drive to 32nd Street is complete. However, south of Civic Center Drive and near the proposed project, there are three alternatives proposed for the segment and pending selection and construction of a final protected alignment along Marina Way and McKinley or Cleveland Avenues. Currently, Bayshore Bikeway is a buffered Class II bike lane along Tidelands Avenue and traverses the Tidelands Avenue/19th Street intersection near the proposed project and terminates at 32nd Street.

The pedestrian network consists mainly of sidewalks along Tidelands Avenue and 19th Street. There is a continuous paved sidewalk along the project's frontage along Tideland's Avenue, however, the sidewalk becomes narrow at certain places due to unmaintained landscaping. The Tidelands Avenue/19th Street intersection is constructed with curb ramps and has pedestrian phasing at the traffic signal for the north, south, and west legs. There is no designated pedestrian crossing phase for the intersection's east leg although, pedestrian and bicycle crossings were observed for this movement as well. While pedestrian phasing is provided for three of the four intersection legs, no crosswalk markings are present. Additionally, there is a pedestrian crossing at Tidelands Avenue near the proposed project ingress driveway, although it was not observed to be heavily utilized during AM or PM peak periods, with one pedestrian and six bicycles crossing throughout both the AM and PM peak periods.

3.6.2.4 Transit Services

The San Diego Metropolitan Transit System (MTS) provides public transportation throughout National City and northern San Diego County. MTS Routes 929, 955, and 962/963 operate in National City. Near the proposed project and east of I-5, MTS Routes 13 and 967 serve the bus stop at the Harding Avenue/18th Street intersection. There are no bus stops or routes near the proposed project along Tidelands Avenue or 19th Street.

The UC San Diego Blue Line is a light rail route/trolley operated by MTS which connects San Ysidro at the U.S.–Mexico border to University Towne Center. Near the proposed project, the alignment is east of I-5 with connecting services at the 8th street station to Naval Base San Diego, and at the 24th street station to the Naval Base San Diego and the National City Marine Terminal.

Figure 3.6-2 illustrates the bike and transit facilities in the vicinity of the proposed project. As shown in the figure, there are no transit facilities within 0.5 miles of the proposed project.

3.6.2.5 Railroad Crossings

The Port and marine-related facilities on San Diego Bay are served by the Class I Burlington Northern Santa Fe (BNSF) Railway on the San Diego Subdivision rail network. The majority of the trains operate at night, with operations typically occurring in two windows: 9:00 a.m. to 11:00 a.m. and 7:00 p.m. to 12:00 a.m. (San Diego Unified Port District 2020).

There are two at-grade crossings in the study area. Railroad Crossing 1 at the Tidelands Avenue/19th Street intersection traverses 19th Street in the north–south direction and traverses both Tidelands Avenue and 19th Street.

Railroad Crossing 2 is located east of Tidelands Avenue/19th Street intersection.

3.6.2.6 Naval Base Gate 13 Operation

The Naval Base San Diego has several gates that allow personnel to enter/exit facilities each day using a typical inspection protocol (i.e., a sentry checks security credentials for each vehicle in succession). Gate 13 is one of the Naval Base San Diego security gates that provide access to the base and is located at the west end of 19th Street. Gate 13 affects the operation of the Tidelands Avenue/19th Street intersection. During peak hours, the gate employs multiple lanes and dual-stacked sentries that allow two to three vehicles to be processed simultaneously in each lane. As noted in Appendix G, Gate 13 is converted into three lanes in the westbound direction to facilitate inbound access during the peak hours in the morning. The hours of operation of Gate 13 are:

- 5:00 a.m. to 8:00 a.m., and
- 2:00 p.m. and 4:30 p.m.
- For all other times of the day, Gate 13 is closed.

3.6.3 Applicable Laws and Regulations

Federal

No federal regulations or guidelines relating to transportation apply to the proposed project.

State

Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law and started a process that changes the methodology of a transportation impact analysis as part of CEQA requirements. SB 743 directed the California Office of Planning and Research (OPR) to establish new CEQA guidance for jurisdictions that removes the level of service (LOS) method, which focuses on automobile vehicle delay and other similar measures of vehicular capacity or traffic congestion, from CEQA transportation analysis. Rather, vehicle miles traveled (VMT), or other measures that promote "the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses," are now be used as the basis for determining significant transportation impacts in the State.

Executive Order B-48-18: Zero-Emission Vehicles

On January 26, 2018, Governor Brown signed Executive Order B-48-18 requiring all State entities to work with the private sector to have at least 5 million zero-emissions vehicles (ZEVs) on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the EV charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook (Eckerle and Jones 2015) to aid in these efforts. All State entities are required to participate in updating the 2016 ZEV Action Plan, along with the 2018 ZEV Action Plan Priorities Update, which includes and extends the 2016 ZEV Action Plan (Governor's Interagency Working Group on Zero-Emission Vehicles 2016, 2018), to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. The GHG benefits of these provisions have not been accounted for in the impact analyses below.

Executive Order N-79-20: Zero Emission Drayage Vehicles

Governor Gavin Newsom signed Executive Order N-79-20 in September 2020, which sets a statewide goal that 100 percent of all new passenger car and truck sales in the state will be zero-emissions by 2035. It also sets a goal that 100 percent of statewide new sales of medium- and heavy-duty vehicles will be zero emissions by 2045, where feasible, and calls for all new sales of drayage trucks to be zero emissions by 2035. Additionally, the Executive Order targets 100 percent of new off-road vehicle sales in the state to be zero emission by 2035. CARB is responsible for implementing the new vehicle sales regulation. The GHG benefits of these provisions have not been accounted for in the impact analyses below.

Regional

SANDAG 2025 Regional Plan

The San Diego Association of Governments (SANDAG) 2025 Regional Plan was adopted by the SANDAG Board of Directors on December 12, 2025 (SANDAG 2025a). It includes the region's Regional Transportation Plan (RTP); Sustainable Community Strategy (SCS), as required by SB 375; and Regional Comprehensive Plan. The 2025 Regional Plan provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources. The SCS describes coordinated transportation and land use planning that meets the state's target for reducing per capita GHG emissions set by the California Air Resources Board (CARB). The 2025 Regional Plan and its final environmental impact report were adopted in winter 2025 (SANDAG 2025b).

SANDAG also prepared a Regional Transportation Improvement Program (RTIP), a 5-year investment plan that identifies projects and programs the San Diego region proposes to fund (SANDAG 2024). The primary purpose of the RTIP is to incrementally implement the latest Regional Plan, which guides regional transportation investments for the next 20 years. Projects funded with federal, state, or TransNet money must be included in an approved RTIP. For SANDAG projects to be incorporated in the RTIP, projects must first be included in the SANDAG Program Budget approved by the SANDAG Board of Directors. The 2025 RTIP (SANDAG 2024) covers 5 fiscal years (FY 2025 through FY 2029) and incrementally implements the latest SANDAG Regional Plan. SANDAG adopted the 2025 RTIP on September 27, 2024. The Federal Highway Administration and Federal Transit Administration approved the 2025 RTIP and its air quality conformance determination on December 16, 2024.

Riding to 2050, the San Diego Regional Bike Plan

The San Diego Regional Bike Plan (Regional Bike Plan) was developed to guide the development of the regional bicycle system through the year 2050, congruent with the forthcoming 2050 RTP. The Regional Bike Plan includes measures to increase bicycle trips and reduce vehicle miles traveled, supporting SANDAG's efforts to lower greenhouse gas emissions in the 2050 RTP and comply with SB 375. The Bayshore Bikeway is one of the regional bikeway projects identified in the Regional Bike Plan.

Local

The project site is within the land use jurisdiction and control of the District. However, because the streets and intersections serving the project site are within the City's jurisdiction, the following local laws, regulations, and plans were taken into account in the analysis of the proposed project's impacts on transportation and circulation.

National City Transportation Element

The Transportation Element (City of National City 2024a), which was updated as part of the Focused General Plan Update in 2024, outlines goals and policies to promote smart growth, improve quality of life for the people in National City, improve health and safety, emphasize the importance of schools by making them focal points within every neighborhood, and provide a framework for sound economic development strategies. The element contains the following policy that relates to the proposed project:

> Policy T-11.5: Identify opportunities for implementation of electric vehicle (EV) infrastructure in coordination with the private sector, prioritizing EV infrastructure targeted to communities most impacted by air pollution.

National City Bicycle Master Plan

The City's Bicycle Master Plan (City of National City 2024b) provides a vision, strategies, and actions for improving the bicycling experience in National City. The Bicycle Master Plan recommends various improvements, based on public input, best practices, and analysis of existing conditions and future opportunities. The recommended improvements include bikeway network facilities, treatments at intersections and other spot locations, and bicycle support facilities. The improved facilities outlined in the plan will help make bicycling an effective transportation option throughout National City. In addition, the Bicycle Master Plan includes design guidelines and bicycle program recommendations and identifies funding sources for specific bicycle projects and programs. The Bayshore Bikeway is one of the projects identified in the Bicycle Master Plan to further the regional bikeway network plans outlined in SANDAG's Regional Bike Plan.

3.6.4 Project Impact Analysis

3.6.4.1 Methodology

The District requires transportation evaluations to address the transportation impact significance thresholds included in the Appendix G Checklist of the CEQA Guidelines. A project would be consistent with applicable plans, policies, and regulations if it would further their objectives and not obstruct their attainment or impede implementation.

Section 15064.3 of the State CEQA Guidelines describes specific considerations for evaluating a project's transportation impacts on transportation and identifies VMT as the most appropriate metric for determining the significance of impacts. Except for roadway capacity projects, Section 15064.3 stipulates that a project's effect on automobile delay shall not constitute a significant environmental impact under CEQA. In accordance with SB 743 and Section 15064.3 of the State CEQA Guidelines, the District and City transitioned from LOS to VMT for determining the significance of transportation impacts. The proposed project would not result in a substantial increase in VMT therefore, this issue will not be further analyzed in the Draft EIR.

As discussed in Section 3 of the Mobility Analysis (Appendix G) the project is forecast to generate 672 daily trips at full buildout (fully operational with all 46 overnight charging stalls leased and the 24 opportunity charging stalls being used throughout the day). As discussed in the project description in Chapter 2 of this EIR, the Truck Hub is anticipated to begin operations with 30 trucks in the Trucking as a Service program with overnight charging. The demand for opportunity charging is unknown, but likely will be minimal given the lack of ZEV trucks currently operating in the San Diego region. By year 3 the remaining 16 overnight charging stalls are anticipated to be enrolled into the Trucking as a Service program, with again an unknown level of opportunity charger use.

At full buildout conditions, 672 daily trips are anticipated, 616 of which are ZEV trucks and autos, with an assumed 432 trips from opportunity chargers. This is based on the assumption that the 24 opportunity chargers generate two daily truck trips per charging stall, at an average charging duration of 75 minutes or 1.25 hour per charging stall, operating over 12 daytime hours.

The Mobility Analysis includes a focused analysis of the Gate 13, the Tidelands Avenue/19th Street intersection, and project access driveways along Tidelands Avenue, which have been used to inform the discussions under Thresholds 1, 3, and 4 in Section 3.6.4.3.

3.6.4.2 Thresholds of Significance

The significance criteria used to evaluate the project's impacts to transportation are based on CEQA Guidelines Appendix G. For the purposes of this project, a potentially significant impact to transportation would occur if the proposed project would:

1. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
2. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
4. Result in inadequate emergency access.
5. Result in an insufficient parking supply that would lead to a decrease in public coastal access.

The District's CEQA Guidelines, adopted in 1997, have not been updated since and include a threshold related to parking. In response to public concerns raised during the scoping period, parking has been included as a threshold for analysis. As discussed in the Environmental Initial Study Checklist (Appendix A), Threshold 2 is not included in the analysis below, as the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3(b) (Threshold 2). This conclusion is summarized in Section 5.5, Effects Found Not to Be Significant, of this Draft EIR. Therefore, only Thresholds 1, 3, 4, and 5 are discussed in the impact analysis below.

3.6.4.3 Project Impacts and Mitigation Measures

Threshold 1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Impact Discussion

An impact on the circulation system, including transit, roadway, bicycle, and pedestrian facilities would occur if the proposed project would conflict with a program, plan, ordinance, or policy addressing these facilities. The project supports regional goals for ZEV infrastructure and helps implementation of electric vehicle infrastructure in coordination with the private sector, prioritizing electric vehicle infrastructure targeted to communities most impacted by air pollution.

The project site is currently used as an overflow parking area for roll-on/roll-off (RoRo) activities by Pasha Automotive Group. There are no pedestrian, bicycle, or transit facilities within the project site; however, the Bayshore Bikeway passes by the site, which is a popular route with cyclists in the region. The Bayshore Bikeway is a buffered Class II bike lane along Tidelands Avenue and traverses the Tidelands Avenue/19th Street intersection near the proposed project and terminates at 32nd Street As noted in Section 3.6.2.6, the Bayshore Bikeway is one of the regional bikeway projects being implemented in phases by SANDAG. The Bayshore Bikeway is identified in SANDAG's Regional Bike Plan and the City's Bicycle Master Plan. Vehicular access to the project site would continue to be off Tidelands Avenue via two driveways: one ingress only on the northern end of the site, and one egress only on the southern end. The parcel currently includes several access driveways along Tidelands Avenue, most of which are closed off with temporary barriers except for that proposed for ingress use by the project. The Pasha Automotive Services access would thus be relocated to one of the existing driveways south of the project egress driveway, north of the intersection of Tidelands Avenue and W 19th Street. Specifically, the driveway immediately south of the project southern perimeter would be opened for use by Pasha Automotive Services operations.

The project proposes a total of 70 charging stalls, which would include 24 opportunity charging stalls and 46 overnight charging stalls. The project's Mobility Analysis (Appendix G) provides a detailed discussion of the trip generation estimation methodology. As shown in Table 3.6-1, once fully operational with all 46 overnight chargers used daily and the 24 opportunity charge stalls servicing up to nine trucks per charging stall over the 12-hour opportunity charging period each day, the proposed project would generate:

- Approximately 524 daily truck trips, 82 AM peak hour truck trips (18 inbound and 64 outbound), and 82 PM peak hour truck trips (64 inbound and 18 outbound).
- Approximately 148 daily auto trips, 66 AM peak hour auto trips (58 inbound and 8 outbound), and 66 PM peak hour auto trips (8 inbound and 58 outbound).
- Therefore, the proposed project would generate a total of 672 daily trips, 148 AM peak hour trips (76 inbound and 72 outbound), and 148 PM peak hour trips (72 inbound and 76 outbound).

The proposed project is intended to replace diesel powered trucks with electric battery trucks. While the project cannot guarantee one diesel powered truck is removed from operation with the use of a ZEV truck, the project generated truck trips may not all represent "new truck trips," as they are intended to replace existing diesel powered truck trips over time.

Table 3.6-1. Project Trip Generation

Land Use – Trip Generation	ITE Code	Size/Units	Vehicle Type	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
ZEV Charging - Trucks [Opportunity Chargers (400 kW)][1]	*24*	stalls	Truck	*432*	18	18	36	18	18	36
ZEV Charging - Trucks [Overnight Chargers (160 kW)][2]	18	stalls	Truck	36	0	18	18	18	0	18
			Auto	36	18	0	18	0	18	18
ZEV Charging - Trucks [Overnight Chargers (240 kW)][2]	28	stalls	Truck	56	0	28	28	28	0	28
			Auto	56	28	0	28	0	28	28
ZEV Charging – Autos & Trucks [Overnight Chargers]	*46*	stalls	Truck and Auto	*184*	46	46	92	46	46	92
Subtotal ZEV Charging	*70*	*stalls*	*All*	*616*	*64*	*64*	*128*	*64*	*64*	*128*
On-Site Parking w/in Charging Area (Employees)[3]	4	spaces	Auto	8	4	0	4	0	4	4
On-Site Parking for Convenience Store (Customers)[4]	4	spaces	Auto	48	8	8	16	8	8	16
Subtotal Ancillary On-Site Parking	*8*	*spaces*	*All*	*56*	*12*	*8*	*20*	*8*	*12*	*20*
Total Trips for Trucks (using Opportunity and Overnight chargers)			*Trucks*	*524*	*18*	*64*	*82*	*64*	*18*	*82*
Total Trips for Autos (Users of overnight chargers and employees and customers of the convenience store)			*Auto*	*148*	*58*	*8*	*66*	*8*	*58*	*66*
Total Trips (Trucks plus Auto)			**All**	**672**	**76**	**72**	**148**	**72**	**76**	**148**

Notes: Some totals may not match due to rounding.

1 Opportunity chargers estimated to charge trucks to 80% in 60 to 90 minutes (average 75 minutes or 1.25 hours) per Volvo VNR Electric Trucks estimates: https://www.volvotrucks.us/trucks/vnr-electric/. The opportunity chargers are expected to primarily operate over 12 daytime hours [1 vehicle every 1.25 hours per stall = 0.8 vehicles per hour per stall, or approximately 9 vehicles per stall over a 12 hour day. Since there are 24 stalls for opportunity charging on-site, this equate to 9 vehicles per stall × 24 stalls = 216 one-way site trips per day, or 432 total daily trips].

2 Overnight chargers are expected to provide charging for one truck. Truck operators are expected to arrive during the morning peak hour, utilize the truck during the day, and return the truck during the afternoon peak hour for the purposes of this analysis. One auto trip and one truck trip is assumed for each charging stall.

3 Four on-site parking spaces are assumed as employee parking for the convenience store or other on-site operations.

4 Four on-site parking spaces are assumed as customer parking for the convenience store. The convenience store is primarily intended as an ancillary use for electric vehicle charging users.

As such, no changes are proposed to the existing roadway, pedestrian, bicycle, and transit facilities outside of the project site that could result in impacts on the existing circulation system.

Therefore, the project would not conflict with future bicycle or pedestrian improvements identified in the SANDAG's Regional Plan and the San Diego Regional Bike Plan or the City's Pedestrian Master Plan and Bicycle Master Plan. Because the project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, impacts would be **less than significant** and no mitigation would be required.

Level of Significance Prior to Mitigation

The proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be **less than significant**.

Threshold 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)?

Impact Discussion

Direct access to the project is provided by Tidelands Avenue north of its intersection with 19th Street. Project traffic would use the two existing project driveways along Tidelands Avenue to access project site—one ingress driveway and one egress driveway. Pasha Automotive Services would use the existing driveway along Tidelands Avenue, south of the project egress driveway, approximately 350 feet north of the intersection of Tidelands Avenue and W 19th Street. The project would not introduce new driveways along Tidelands Avenue. At the western terminus of W 19th street is Gate 13, which provide access (ingress/egress) to Navy Base San Diego for authorized personnel.

Vehicular queues at Gate 13 and nearby approaches of the Tidelands Avenue/19th Street intersection would increase slightly but would be similar to the existing conditions, and project driveways would remain unobstructed. The driveway to the Pasha Automotive Services could occasionally experience delayed access for a short duration in the AM peak hour, because the maximum southbound queue on Tidelands Avenue is greater than 350 feet under existing conditions in the AM peak hour due to vehicles accessing Navy Gate 13. Pasha Automotive Services does not operate daily and there are no known access issues.

As detailed in the Caltrans Highway Design Manual (HDM) (Caltrans 2020), pavements are engineered to carry the truck traffic loads expected during the pavement design life. Truck traffic is the primary factor affecting pavement design life and its serviceability. A few studies have evaluated long-term impacts of heavy-duty electric vehicles (HDEVs) on road infrastructure and noted that HDEVs apply a relatively larger axle load and more significant torque because of the battery weight and electric motor compared to Internal Combustion Engine (ICE) trucks that are powered by diesel or gasoline.

It should be noted that the estimation of Traffic Index for the roadway segment of Tidelands Avenue near the project in this section uses a conservative estimate of 524 new (versus replaced truck trips) daily truck tips which represents full use of the site from both overnight and opportunity truck charging; the analysis provided is conservative and not likely to occur in the initial operating years of the project.

The Pavement Condition Index (PCI) method is the industry standard and most widely used method for assessing and reporting street pavement conditions. It is an objective and repeatable assessment of the structural integrity and operational condition of street pavements. The PCI scoring scale ranges from 0 (worst) to 100 (best) and provides a common language for pavement practitioners to describe and communicate pavement conditions.

A review of potential traffic impacts to pavement conditions is conducted using Equivalent Single Axle Load (ESAL) and Traffic Index (TI) calculations. The calculation of Traffic Index (TI) is a measure of the deteriorating effects that truck traffic has on asphalt concrete pavement (also referred to as flexible pavement) and provides the information necessary to design a structural section for a roadway. The TI calculation can be used to determine the PCI for the roadway segment of Tidelands Avenue adjacent to the project to assess the potential change in pavement conditions with the project-added truck trips.

The TI calculation provided in the Caltrans HDM procedures as described in Chapter 610, Pavement Engineering Considerations, Topic 613 – Traffic Considerations (Caltrans 2020) are for ICE trucks. Because the project's trucks would be heavy-duty battery-electric, the ESAL and TI calculation was conducted using the specifications available for axle load for Tesla Semi trucks. The calculation has been conducted only for the base year to provide a comparison between an ICE and Heavy-Duty ZEV truck. Additionally, ESAL constants are not available for multiple design years for Heavy-Duty ZEVs and the methodology to calculate TI for heavy-duty electric battery trucks has not been standardized yet.

The TI represents the total cumulative traffic loading of vehicle types by axle classification of the 18-kip ESAL expected on a given lane over a given period. A 5-axle ZEV truck weighs up to 82,000 pounds compared to a 5-axle ICE truck that weighs up to 80,000 pounds.

Use of the roadway segment of Tidelands Avenue by the proposed project is predicted to potentially result in an increase of 2.0 TI (from 6.5 to 8.5 TI), 0.5 greater than ICE trucks would result in, owing to the increased weight of EV trucks, over a full year with all 70 charging stalls fully used resulting in 524 daily truck trips. The 0.5 greater TI score of heavy-duty battery-electric trucks versus ICE trucks is negligible and would not appreciably increase pavement deterioration. See Table 7, TI Calculation for Tidelands Avenue near the Project, of Appendix G. The analysis reveals that new use of the roadway segment would cause wear and tear of the pavement surface, however, the difference between the wear and tear of a heavy-duty battery-electric truck versus an ICE truck is negligible.

It should also be noted there are many users of this segment of Tidelands Avenue, including Navy Base San Diego, several shipyards, municipal buses and passenger vehicles, whose volume is uncontrolled and not clearly under any local, state or federal governmental control. This segment of Tidelands Avenue is also a National City designated truck route intended to facilitate the movement of heavy-duty trucks to the regional freeway network.

The project would not result in hazardous conditions as a result of geometric design features such as sharp curves or incompatible uses, nor would the use of the roadway segment by heavy-duty battery-electric trucks result in significantly increased pavement wear. Therefore, the impacts would be **less than significant**.

Level of Significance Prior to Mitigation

Implementation of the proposed project would not substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be **less than significant**.

Threshold 4: Would the project result in inadequate emergency access?

Impact Discussion

The project site is within a local responsibility area and is designated by CAL FIRE as a non-VHFHSZ (CAL FIRE 2025), with the nearest VHFHSZ located approximately 6.7 miles east of the project site. The San Diego County Emergency Operations Plan (EOP) is used within San Diego County to aid with the response to major emergencies and disasters. The EOP identifies evacuation routes along major interstates and highways in San Diego County (County of San Diego 2022). The project site is not located along any major interstates or highways. There would not be any change to emergency access to the project location and the project would not result in the temporary or permanent closures of public roadways or driveways. Emergency access to the site would be provided via Tidelands Avenue, a collector street with sufficient width and connectivity with the other collector and arterial streets to accommodate emergency vehicles along an established emergency route. As discussed in the project's Mobility Analysis (Appendix G) the project trips would not degrade the operational condition of the Tidelands Avenue/19th Street intersection. The project trips would nominally increase vehicular queuing under the Existing plus Project conditions. The increase would not be considered significant compared to the Existing Conditions and would not obstruct the project driveways on Tidelands Avenue under majority of the AM peak hour duration or worsen the operation of Gate 13 compared to the existing conditions, in the AM or PM peak hour.

Additionally, the project does not propose any changes to the public right-of-way or circulation system that would restrict emergency response routes. The project's driveways would be designed in accordance with City standards, and the proposed project would be accessible to emergency responders during construction and operation of the project. Therefore, the project's impacts associated with inadequate emergency access or obstruction of implementation of evacuation plans would be **less than significant**.

Level of Significance Prior to Mitigation

The proposed project would not result in inadequate emergency access. Impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be **less than significant**.

Threshold 5: Result in an insufficient parking supply that would lead to a decrease in public coastal access?

Impact Discussion

The project site is zoned for Industrial, Maritime Related, and permitted uses include manufacturing, storage, transportation facilities, and distribution. The project site is currently developed with parking as an overflow RoRo yard and chassis storage facility (parking) for Pasha Automotive Services. The project would result in a change in operations from RoRo activities by Pasha Automotive Group, to a primary electrical charging for ZEV trucks operating at marine terminals and associated facilities, however, the operations of the project site would remain consistent with the project site zoning. Approximately 1,000 parking spaces are currently available and approximately 500 overflow parking spaces currently used by Pasha Automotive Services for RoRo activities would be removed with the proposed project. It is anticipated that any parking demand in excess of the residual spaces available at the existing site would be managed using other existing sites operated by Pasha Automotive Services. No parking demand from use of the existing site would overflow off site to decrease public coastal access.

During construction, as part of the project design, the proposed project would provide parking for construction workers at the designated equipment and material staging areas on-site or in the immediate area of the construction site location. A maximum of approximately 30 construction workers are anticipated to access the site during peak construction, with an average of approximately 10 workers per day. The project would create a temporary demand for parking during construction activities for approximately 9 months, which would be met on site or in the project's immediate vicinity.

Project operations consist of charging up to 70 electric trucks simultaneously. The primary use of the facility is for electric drayage and terminal bound/originated electric trucks. As an accessory or secondary use of the facility, based on availability, the remaining charging positions may be used for charging all electric vehicles, including heavy and medium duty trucks not servicing one of the cargo terminals, passengers vehicles, and municipal/government fleet vehicles. A convenience store would operate at the project site with intent of servicing electric vehicle charging users. Up to eight parking spaces may be provided on site including standard parking spaces and an Americans with Disabilities Act (ADA) compliant space. Two on-site parking spaces are intended for use by convenience store customers. There is no public coastal access parking currently available on site. Available street parking along Tideland Avenue, while a considerable distance to any public access to San Diego Bay, would remain available. Therefore, the project would provide parking to accommodate vehicle use of the site and would not result in an insufficient parking supply and would not lead to a decrease in public coastal access. Impacts would be **less than significant**.

Level of Significance Prior to Mitigation

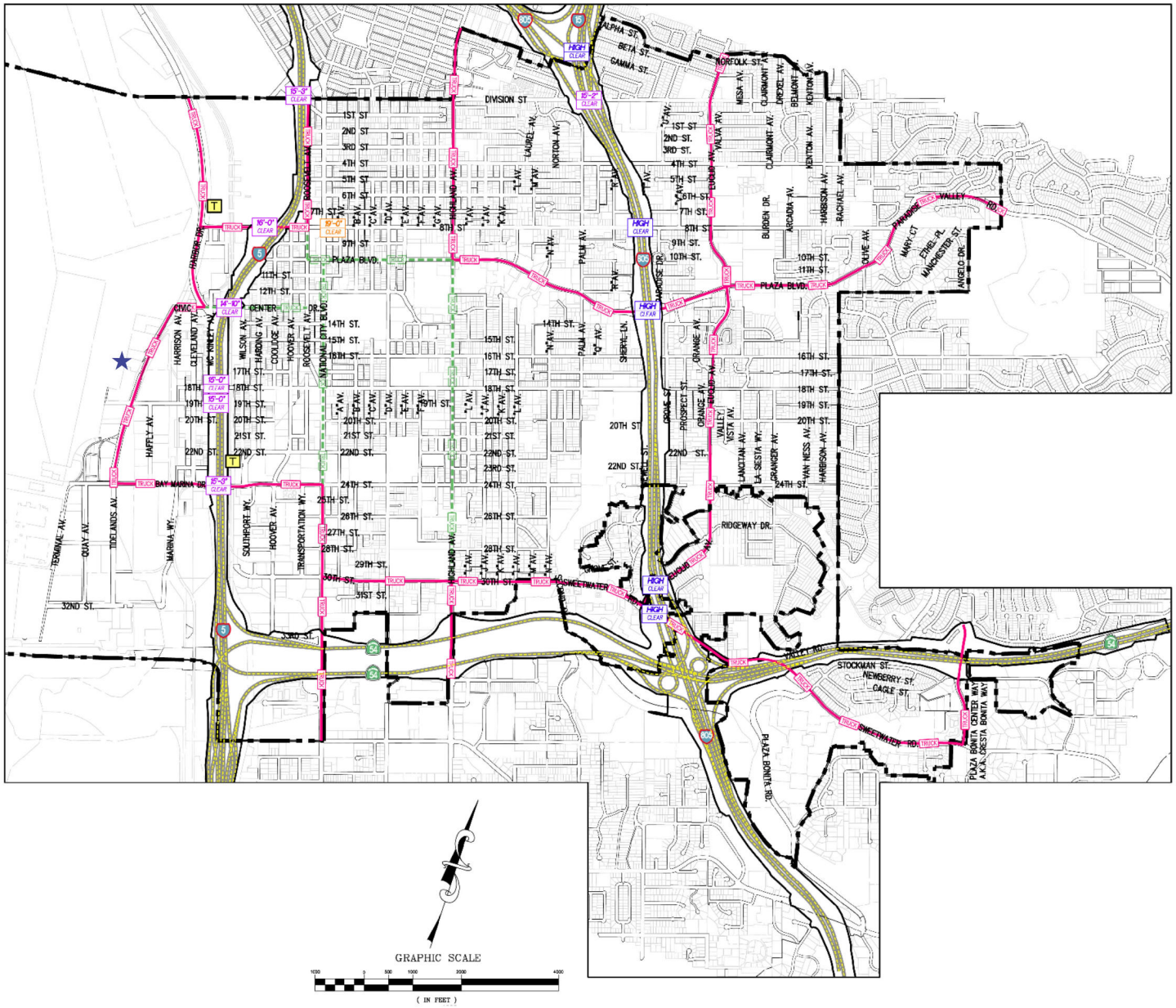
The proposed project would not result in an insufficient parking supply that would lead to a decrease in public coastal access. Impact would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be **less than significant.**



Legend

LEGEND

- CITY BOUNDARY
- PRIMARY TRUCK ROUTES
- ALTERNATE TRUCK ROUTES
- FREEWAY OVERPASS CLEARANCE
- FREEWAY OVERPASS CLEARANCE GOOD FOR ALL LOADS
- PEDESTRIAN BRIDGE CLEARANCE
- TROLLEY STATION
- INTERSTATE / STATE HIGHWAY

NOTE:
TRUCKS EXCEEDING A MAXIMUM GROSS WEIGHT OF 6,000 LBS. (3 TONS) ARE REQUIRED TO USE DESIGNATED TRUCK ROUTES.

Project Location

Source: City of National City

The information on this map was derived from various digital databases, sourced above. Care was taken in the creation of this map but it is provided "as is". PDC cannot accept any responsibility for any errors, omissions, or positional accuracy, and therefore, there are no warranties which accompany this product. Users are cautioned to field verify information on this product before making any decisions.

Figure C-8
Truck Routes

SOURCE: City of National City, 2025

FIGURE 3.6-1
Truck Routes
Tidelands Avenue Electric Truck Hub

DUDEK

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SOURCE: SanGIS 2025; Maxar 2025

DUDEK

0 1,300 2,600 Feet

FIGURE 3.6-2

Bike and Transit Facilities

Tidelands Avenue Electric Truck Hub

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4 Cumulative Impacts

4.1 Overview

According to the California Environmental Quality Act (CEQA) Guidelines Section 15130, an environmental impact report (EIR) must discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. As defined in Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. *Cumulatively considerable* means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.

This chapter considers the cumulative effects of past, present, and probable future projects and the contribution of the proposed Tidelands Avenue Electric Truck Hub Project (project) to these effects. Past projects are defined as those that were recently completed (typically in the last 5 years) and are now operational. Present projects are defined are those that are under construction but not year operational. Probable future projects are defined as those for which a development application has been submitted or credible information is available to suggest that project development is a probable outcome at the Notice of Preparation (NOP) for this EIR was issued (June 17, 2025).

4.2 Cumulative Impact Analysis Methodology

According to CEQA Guidelines Section 15130(b), cumulative impact analysis may be conducted using one of two methods: the List Method, which includes "a list of past, present, and probable activities producing related or cumulative impacts"; or the Plan Method, which uses "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact." The cumulative analysis of near-term conditions for all issue areas uses the List Method.

The process of analyzing cumulative impacts first involves understanding the context of the cumulative conditions for each resource area. This involves determining the area of effect, or study area, within which past, present, and reasonably foreseeable future projects, along with the proposed project, have the potential to contribute to cumulative impacts. Generally, the geographic scope of the area affected by cumulative effects varies according to the issue area. The study area for each issue area is described further under the respective resource headings. An analysis of the significance of the cumulative effect from past, present, and reasonably foreseeable projects is conducted, which may be a qualitative analysis, or a deduction may be made based on relevant environmental documentation and studies. In the event a cumulative effect is identified, the proposed project's incremental contribution to that cumulative effect must be analyzed. The project's individual impacts are assessed in the context of the cumulative impacts from past, present, and reasonably foreseeable future projects to determine if the project impacts are "cumulatively considerable" based on the project's magnitude of contribution to the cumulative context or baseline. If it is determined that the proposed project's contribution to the cumulative effect is considerable, a cumulatively significant impact is identified, and mitigation is imposed.

4.2.1 Cumulative Projects List

A total of 15 cumulative projects were identified for this analysis. The projects listed in the proposed project's cumulative study area have had applications submitted or have been approved, are under construction, or have recently been completed. The cumulative projects identified in the study area are listed in Table 4-1 and shown on Figure 4-1, Cumulative Project Locations.

Table 4-1. Cumulative Projects List

Project Number	Name	Location	Status
1	National City Bayfront Projects and Plan Amendments	National City	Approved by CCC; pending final Board of Port Commissioners acceptance
2	Austal USA Floating Dry Dock Project	1313 Bay Marina Drive, National City, California 91950	Approved; construction timeline unknown
3	NASSCO Floating Dry Dock Replacement and Waterfront Improvement Project	2798 East Harbor Drive, San Diego, California 92113	Construction estimated January 2025–January 2034
4	BAE Systems Waterfront Improvement Project	2205 East Belt Street, San Diego, California 92113	Construction estimated June 2021–March 2026
5	Structural Repairs at NCMT Berth 24-11	National City Marine Terminal (NCMT), National City, California	Complete
6	Structural Repairs at NCMT Berth 24-3	NCMT, National City, California	Complete
7	Electrical Upgrades to NCMT Berths 24-10 and 24-11	NCMT, National City, California	Complete
8	Peregrine Energy Storage	2669 and 2697 Main Street and 1345 South 27th Street, San Diego	Approved
9	P-508 Floating Dry-Dock and Supporting Facilities	Naval Base San Diego (NBSD), San Diego, CA.	Under construction, complete in 2027
10	P-1301 Micro-grid and Backup Power	NBSD, San Diego, CA	Under construction, complete in 2026
11	Underground Storage Tank Replacement	NBSD, San Diego, CA	Under construction, complete in 2026
12	P-639 Child Development Center	NBSD, San Diego, CA	Planned for 2026
13	Chollas Creek Quay Wall Permanent Replacement	NBSD, San Diego, CA	Planned for 2026
14	P-0891 69KV Substation	NBSD, San Diego, CA	Planned for 2028
15	P-0999 Switching Station	NBSD, San Diego, CA	Planned for 2030

4.3 Cumulative Impact Analysis

The discussion below evaluates the potential for the proposed project to contribute to a cumulative adverse impact on the environment. For each resource area, an introductory statement is made regarding what would amount to a significant cumulative impact for a particular resource area.

The analysis that follows considers two separate impacts: (1) the significance of the cumulative effect from past, present, and probable projects and, (2) in the event a significant cumulative effect is identified, the proposed project's incremental contribution to that cumulative effect.

According to CEQA Guidelines Section 15130 (a)(1), an EIR should not discuss impacts that do not result in part from the project evaluated in the EIR. Based on the analysis provided in the Initial Study Environmental Checklist (Appendix A of this EIR), it was determined that the project's impacts related to aesthetics, agricultural and forestry resources, biological resources, cultural resources, geology and soils, greenhouse gas emissions, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire would not be significant. Consequently, the proposed project would not have a potential to contribute to cumulative impacts related to these resources, and they are not discussed in the cumulative impact analysis below.

Impacts related to noise were also determined to be less than significant in the Initial Study Environmental Checklist; however, in response to public scoping comments, impacts related to noise were discussed in the environmental analysis of the EIR. Therefore, the cumulative analysis that follows addresses the incremental contribution of the proposed project to cumulative impacts associated with air quality, energy, hazards and hazardous materials, hydrology and water quality, noise, and transportation.

4.3.1 Air Quality

Potential cumulative air quality impacts would result when cumulative projects' emissions would combine to degrade air quality conditions below attainment levels for the San Diego Air Basin (SDAB), delay attainment of air quality standards, affect sensitive receptors, or subject surrounding areas to objectionable odors. Neither the District nor the City has adopted quantitative CEQA thresholds to determine whether a project's incremental contribution of emissions would be cumulatively considerable. Therefore, the Air Quality Impact Analysis (AQIA) Trigger Levels outlined in San Diego Air Pollution Control District (SDAPCD) Regulation II, Rules 20.2 and 20.3, for new or modified sources, and the County of San Diego's screening level thresholds (SLTs), are used for the analysis of impacts related to emissions for proposed project construction and operations evaluated within the context of past, present, and reasonably foreseeable future projects.

4.3.1.1 Geographic Scope

The SDAB, which covers 4,260 square miles of Southern California and is contiguous with San Diego County, represents the cumulative geographic scope for air quality impacts related to consistency with air quality plans and air quality threshold levels because plans and thresholds are established at the air basin–wide level to attain air quality standards that are assigned for the entire air basin, which in this case is the entire County. Cumulative impacts on sensitive receptors and odors are considered at a more localized level due to the more limited area of dispersion and include the surrounding neighborhoods and areas close to the source of the emission and odor sources, respectively. Localized air quality conditions are influenced by a variety of sources, and guidance from

several lead agencies, including the Bay Area Air Quality Management District (2017) and the California Air Resources Board (2005), recommend analyzing the effects of emissions from sources within 1,000 feet of proposed new emission sources or proposed new receptor locations.

4.3.1.2 Cumulative Effects

Past projects within the SDAB have involved the emissions of ozone precursors (reactive organic gases [ROG] or volatile organic compounds [VOC] and nitrogen oxides [NO_x]), particulate matter 10 microns or less in diameter (PM_{10}), and particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), resulting in nonattainment status for 8-hour ozone under National Ambient Air Quality Standards (NAAQS) and nonattainment status for ozone, PM_{10}, and $PM_{2.5}$ under California Ambient Air Quality Standards (CAAQS). Therefore, the emissions of concern within the SDAB are ozone precursors (ROG and NO_x), PM_{10}, and $PM_{2.5}$. The nonattainment status for the entire County is a consequence of past and present projects; the cumulative contribution of reasonably foreseeable future projects, such as those listed in Table 4-1, could result in continued nonattainment. The precise locations of the NBSD projects have not been identified; however, these projects are relatively small in scale and are not anticipated to result in significant cumulative impacts on air quality. The reasonably foreseeable future projects within 1,000 feet of the proposed project that could contribute cumulative impacts on localized air quality conditions generally include the National City Bayfront Projects and Plan Amendments (Cumulative Project No. 1). At the time of preparing this analysis, the National City Bayfront Projects and Plan Amendments project has been approved by the California Coastal Commission but is pending final Board of Port Commissioners acceptance, and no construction timeline has been established. Given the lack of a defined construction schedule, the extent of any potential overlap cannot be determined at this time. However, because past and present projects have resulted in the current nonattainment status for ozone (ROG and NO_x), PM_{10}, and $PM_{2.5}$, and reasonably foreseeable future projects would continue to contribute to the nonattainment status and potentially affect sensitive receptors, impacts related to the cumulative contribution of nonattainment pollutants (ozone precursors, PM_{10}, and $PM_{2.5}$) and the exposure of sensitive receptors to substantial pollutant concentrations would be considered cumulatively significant.

4.3.1.3 Project Contribution

The SDAB has been designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. The poor air quality in the SDAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., VOCs and NO_x for O_3) potentially contribute to poor air quality. In analyzing cumulative impacts from a project, the analysis must specifically evaluate the project's contribution to the cumulative increase in pollutants for which the SDAB is designated as nonattainment for the CAAQS and NAAQS. If the project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, a project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Regarding short-term construction impacts, the SDAPCD thresholds of significance are used to determine whether the project may have a short-term cumulative impact. As shown in Table 3.1-6 in Section 3.1, Air Quality, the project would not exceed any criteria air pollutant during construction. Therefore, the project would have a less-than-significant cumulative impact during construction.

Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions in the basin to ensure the SDAB continues to make progress toward NAAQS- and CAAQS-attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the SIP and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and the County as part of the development of their general plans. Therefore, projects that propose development that is consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS and would not be considered to result in cumulatively considerable impacts from operational emissions. As stated previously, the proposed project would not result in significant regional growth not accounted for within the RAQS. As a result, the proposed project would not result in a cumulatively considerable contribution to pollutant emissions. Cumulative impacts would be less than significant during construction and operation.

4.3.1.4 Cumulative Impact Determination

The proposed project's incremental contribution to cumulative air quality impacts would not be cumulatively considerable and would be less than significant. No cumulative impact–specific mitigation is required.

4.3.2 Energy

A significant cumulative impact on energy would result if the proposed project would contribute to cumulative impacts related to a 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.

4.3.2.1 Geographic Scope

The geographic scope for cumulative impacts for energy usage includes the San Diego Gas & Electric Company (SDG&E) service area, which is the entire County, and surrounding vicinity.

4.3.2.2 Cumulative Effects

A cumulative energy consumption impact would occur if development associated with projects identified in Table 4-1 or within the geographic scope of the cumulative impact analysis for energy use combined with the proposed project would increase energy consumption throughout the region. The cumulative projects listed in Table 4-1 would result in the redevelopment of urbanized sites that are currently served by SDG&E, and the development of the cumulative projects would not result in an expansion of SDG&E's service area. However, the cumulative projects would result in increases in energy demand compared to existing conditions, especially for those projects on an undeveloped site that would result in new energy demand. As required by the California Public Utilities Commission (CPUC), California utilities, including SDG&E, are required to file long-term energy resources plans with the CPUC. SDG&E's most recent long-term procurement plan was filed in October 2014 and includes

plans and strategies to meet the future energy demands of its customers. SDG&E would continue to import electricity and natural gas to meet regional demand; however, an increase in imported energy to meet demand could result in high energy prices and unreliable supply. SANDAG adopted a Regional Energy Strategy (RES) in 2009 to specifically address regional energy supply. The RES includes proposed Early Actions to promote long-term energy efficiency and availability in the region. In 2014, a technical update of the RES was completed to inform the development of the 2021 Regional Plan. If the cumulative projects would not support the implementation of applicable Early Actions from the RES, a cumulative impact could occur. The cumulative projects would be required to comply with the Title 24 energy efficiency standards, which promote energy efficiency and reduce inefficient, wasteful, and unnecessary consumption of energy, as well as any other City-specific requirements. However, Title 24 does not require additional measures to support the other RES Early Actions, including supporting alternative transportation to reduce transportation energy use, reducing GHG emissions from energy use, and limiting water use to reduce indirect energy use for water transport. As such, it is possible that present and reasonably foreseeable future projects would not comply with all programs and policies designed to reduce energy demand. Therefore, impacts from past, present, and reasonably foreseeable future projects would be cumulatively significant.

4.3.2.3 Project Contribution

The proposed project would have a less-than-significant impact related to energy, as it would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation, nor conflict with or obstruct applicable state or local plans for renewable energy or energy efficiency. Cumulative projects would be required, as applicable, to conform to current federal, state, and local energy conservation standards, including those identified in earlier portions of this section. For example, future development would be subject to the CCR Title 24 standards in place at the time of construction.

As a result, the project, in combination with other reasonably foreseeable projects, would not cause a wasteful use of energy or other nonrenewable natural resources. Therefore, the energy demand and use associated with the project and cumulative projects would not substantially contribute to a cumulative impact on existing or proposed energy supplies or resources and would not cause a significant cumulative impact on energy resources.

The project would result in an increase in VMT and associated petroleum use and would therefore contribute to the petroleum use within San Diego County. However, the project's incremental contribution is minimal. Therefore, the project would not result in a cumulatively considerable impact to petroleum use.

Similarly, the project would not conflict with applicable plans for renewable energy or energy efficiency, as it would be required to include solar and adhere to other building efficiency standards pursuant to CCR Title 24. As such, the project, in combination with other reasonably foreseeable projects, would not conflict with a state or local plan for renewable energy or energy efficiency. Cumulative impacts would be less than significant, and the proposed project's contribution to cumulative energy impacts would not be cumulatively considerable.

4.3.2.4 Cumulative Impact Determination

The proposed project's incremental contribution to cumulative impacts related to energy would be less than cumulatively considerable. No cumulative impact–specific mitigation is required.

4.3.3 Hazards and Hazardous Materials

A significant cumulative impact on hazards and hazardous materials would result if the proposed project were to contribute to impacts related to 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 related to being located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. Because the proposed project would have no impact related to the following issues, it would also have no cumulative impacts related to hazardous emissions or materials within 0.25 miles of an existing or proposed school or being located within an airport land use plan or within 2 miles of a public airport or public use airport.

4.3.3.1 Geographic Scope

The hazards and hazardous materials geographic scope consists of the areas that could be affected by proposed project activities, as well as areas affected by other projects whose activities could directly or indirectly affect the proposed activities on the project site. In general, projects occurring within 0.12 miles of the project site (and in the case of active release sites, within 0.25 miles) were considered in this analysis due to the localized nature of potential impacts associated with the release of hazardous materials into the environment.

4.3.3.2 Cumulative Effects

As discussed in Section 3.3, Hazards and Hazardous Materials, a Phase I Environmental Site Assessment was conducted for the project site, which includes record searches using federal and state databases, including the State Water Resources Control Board (SWRCB) GeoTracker database and the Department of Toxic Substances Control (DTSC) EnviroStor database. The results indicate that there are multiple sites within 0.25 miles of the project site that involve the handling of hazardous materials.

Simply the presence of sites (with a history of releases) within the cumulative study area is not sufficient to determine if a significant cumulative impact is present. Evidence must suggest that the contamination has resulted in a cumulative condition to which other projects are contributing. This was not evident during the database research because existing contamination was caused by site-specific incidents at individual sites and not exacerbated by multiple sites. Therefore, impacts from past cumulative projects are not cumulatively significant. Present and reasonably foreseeable future projects within the cumulative study area could disrupt or result in the exposure of hazardous materials that are typically used during construction activities. For projects having the potential to disrupt or result in the exposure of hazardous materials, mitigation measures would be required during construction to reduce potential impacts to a level below significance. These projects, like the proposed project, are required to comply with all federal, state, and local policies regarding hazards and hazardous materials, as the ones described in Section 3.3.3, Applicable Laws and Regulations, which would reduce potential releases of hazardous materials into the environment. Because all cumulative projects listed in Table 4-1 with potential to expose hazardous materials during construction in the vicinity of the project site would be subject to federal, state, and local hazardous materials laws, including those described in Section 3.3.3, cumulative effects related to hazardous materials from past, present, and reasonably foreseeable future projects would be less than cumulatively significant.

4.3.3.3 Project Contribution

The proposed project would have a less-than-significant impact related to hazards and hazardous materials. Construction and operation of the project would occur in accordance with all applicable local standards set forth by the District, as well as state and federal health and safety requirements that are intended to minimize hazardous materials risk to the public, such as Cal/OSHA requirements, the Hazardous Waste Control Act, and the California Health and Safety Code. The project would implement best management practices (BMPs) required by the National Pollutant Discharge Elimination System Construction General Permit to ensure proper handling, recycling, and disposal of materials, and to prevent the release of hazardous substances. Due to the limited quantities of hazardous materials required for use in the construction, operation, and decommissioning of the proposed project, the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Implementation of the project's Emergency Response Plan (ERP) and Hazardous Materials Assessment (HMA) recommendations would effectively minimize the potential for upset or accident conditions involving hazardous materials during both construction and operation of the project. Additionally, the project site is not located on, nor is impacted by, a hazardous material release site listed pursuant to Government Code Section 65962.5.

As such, the project's impacts related to hazards and hazardous materials would be less than significant. Therefore, the proposed project's incremental contribution to significant cumulative water quality impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

4.3.3.4 Cumulative Impact Determination

The proposed project's incremental contribution to cumulative hazards and hazardous materials impacts would not be cumulatively considerable and would be less than significant. No cumulative impact–specific mitigation is required.

4.3.4 Hydrology and Water Quality

A significant cumulative impact on hydrology and water quality would result if the proposed project were to contribute to impacts related to water quality standard violations, depletion of groundwater supplies or interference with recharge, alterations to drainage patterns leading to erosion or flooding, increased runoff in excess of available capacity, substantial additional sources of polluted runoff, the placement of structures within a 100-year flood hazard area that would impede or redirect flood flows, and/or exposure of people or structures to flooding risk from inundations by seiche or tsunami. These are evaluated within the context of past, present, and reasonably foreseeable future projects. The proposed project is not anticipated to result in impacts related to depletion of groundwater supplies or interference with recharge; alterations to drainage patterns leading to erosion or flooding; placement of structures within a 100-year flood hazard area; and/or the exposure of people or structures to flooding risk from inundations by dam and/or levee failure, seiche, or tsunami. As such, cumulative impacts related to these issues are not evaluated.

4.3.4.1 Geographic Scope

The geographic scope of analysis for cumulative impacts on hydrology and water quality includes the San Diego Watershed Management Area (WMA), which includes all of the projects listed in Table 4-1.

4.3.4.2 Cumulative Effects

Past projects within the San Diego WMA have contributed pollutants to San Diego Bay, as evidenced by the CWA Section 303(d) List of Water Quality Limited Segments Requiring Total Maximum Daily Loads. Current and future projects would be subject to state and local regulatory standards that must be achieved during construction and operation to reduce or avoid polluted runoff to the maximum extent practicable. These current and reasonably foreseeable future projects could also contribute pollutants such as oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens into the stormwater conveyance system and receiving waters.

Many of the nearby projects listed in Table 4-1 would involve at least 1 acre of grading. During construction of these projects, they would be required to comply with the National Pollution Discharge Elimination System Construction General Permit, which requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer and implementation of BMPs by a Qualified SWPPP Practitioner to ensure runoff from individual projects meet current water quality standards. For projects under 1 acre, the Municipal Permit (via the Jurisdictional Runoff Management Plan [JRMP]) requires minimum BMPs at all construction and grading projects. The minimum BMPs are required to ensure a reduction of potential pollutants from the project site to the maximum extent practicable and to effectively prohibit non-stormwater discharges from construction sites to the Municipal Separate Storm Sewer System.

Present and reasonably foreseeable future projects would be subject to regulations that require compliance with water quality standards, including state and local water quality regulations and the District's JRMP and local BMP Design Manual (for projects within the District's jurisdiction), National City's JRMP, and the City of San Diego's Stormwater Management and Discharge Control Ordinance, which identifies water quality BMP requirements (for projects within the City of San Diego's jurisdiction). The Stormwater Management and Discharge Control Ordinance requires implementation of measures to reduce the risk of non-stormwater discharges and pollutant discharges through the use of BMPs. However, because San Diego Bay is currently an impaired water body and has been for some time, the cumulative effect of past, present, and reasonably foreseeable future projects would have the potential to result in a cumulatively significant water quality impact.

4.3.4.3 Project Contribution

A cumulatively significant impact on hydrology and water quality presently exists because of San Diego Bay's status as an impaired water body and the potential for present and future projects to further degrade water quality with the addition of similar pollutants as those already impairing San Diego Bay.

The proposed project would involve construction activities that would expose soils and, as such, would require compliance with the Construction General Permit. Compliance with the Construction General Permit would require development and implementation of a SWPPP by a Qualified SWPPP Developer, which would list BMPs that would be implemented by a Qualified SWPPP Practitioner to protect stormwater runoff and include a monitoring plan for measuring BMP effectiveness. At a minimum, BMPs would include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The SWPPP would specify properly designed, centralized storage areas that keep these materials out of the rain. The primary BMPs selected would focus on erosion control (i.e., keeping sediment in place) followed by sediment control (i.e., keeping sediment on the site). In addition to the SWPPP, implementation of construction BMPs identified in the District's JRMP and BMP Design Manual would be required, which would reduce impacts on water quality during construction.

The District's JRMP, the San Diego Bay WQIP, and the Basin Plan are the local water quality management plans that apply to the proposed project. The proposed project would comply with existing regulatory requirements and would implement BMPs as required by the Construction General Permit and the District's JRMP to reduce or prevent runoff pollution, which would be consistent with the applicable water quality control plans.

As such, the project's impacts related to hydrology and water quality would be less than significant. Therefore, the proposed project's incremental contribution to significant cumulative water quality impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

4.3.4.4 Cumulative Impact Determination

The proposed project's incremental contribution to cumulative impacts related to hydrology and water quality would be less than cumulatively considerable. No cumulative impact–specific mitigation is required.

4.3.5 Noise

A significant cumulative impact on noise would result if the proposed project were to contribute to impacts related to exceedances of noise standards, groundborne vibration, or ambient noise levels when evaluated within the context of past, present, and reasonably foreseeable future projects. At the project level, there were determined to be no impacts related to air traffic noise; as such, cumulative impacts related to air traffic noise are not evaluated.

4.3.5.1 Geographic Scope

The geographic scope of analysis for cumulative noise impacts (construction and operations) includes the project site and adjacent land uses, including nearby noise-sensitive receptors. The cumulative study area is in a highly industrialized area with ambient noise levels influenced by adjacent transportation corridors and industrial land uses.

4.3.5.2 Cumulative Effects

Very few of the cumulative projects listed in Table 4-1 are within the cumulative study area for noise impacts. The distance to the other projects, along with the shielding provided by intervening buildings, would substantially reduce construction noise from these projects so that they would not generate any cumulative impacts in the immediate vicinity of the project site. The precise locations of the NBSD projects have not been identified; however, these projects are relatively small in scale and are not anticipated to result in significant cumulative noise impacts. Cumulative Project No. 1, National City Bayfront Projects and Plan Amendments, is the only cumulative project, with a known precise location. located within 0.25 miles of the project site. At the time of preparing this analysis, the National City Bayfront Projects and Plan Amendments project has been approved by the California Coastal Commission but is pending final Board of Port Commissioners acceptance, and no construction timeline has been established. Given the lack of a defined construction schedule, the extent of any potential overlap cannot be determined at this time. However, with regards to noise impacts, the EIR for National City Bayfront Projects and Plan Amendments concluded less-than-significant impacts related to construction and operations for the components in the vicinity of the project (Port of San Diego 2022; City of National City 2024).

Because the remaining cumulative projects are located over 0.25 miles from the project site or have already been constructed, the cumulative projects would be at a substantial distance such that noise would attenuate and

cumulative impacts would not occur. Therefore, cumulative effects from past, present, and probable future projects would not be significant.

4.3.5.3 Project Contribution

As discussed in Section 3.5, Noise, construction activities associated with the proposed project would result in less-than-significant impacts relative to local noise standards and temporary noise increases, as well as established thresholds for groundborne vibration. In addition, as noted above, a cumulatively significant noise impact does not exist, and the proposed project would not result in an impact such that a cumulatively significant impact would be created. The proposed project's contribution to construction-related noise and vibration impacts would be less than cumulatively considerable. Consequently, even if construction of nearby projects (e.g., Cumulative Project No. 1) were to occur concurrently with proposed project construction, the proposed project's contribution to cumulative impacts would be less than cumulatively considerable.

In terms of project operations, the project would include new sources of noise on the project site, including electric vehicle chargers; heating, ventilation, and air conditioning (HVAC) units associated with the convenience store; and the BESS units. As discussed in Section 3.5, the increased noise levels associated with the proposed project are not anticipated to be distinguishable from other background noise sources and would not be above National City's noise limits. As such, operational noise and vibration levels would be less than significant, and the proposed project's contribution to cumulative impacts would be less than cumulatively considerable.

4.3.5.4 Cumulative Impact Determination

The proposed project's incremental contribution to cumulative impacts related to noise would be less than cumulatively considerable. No cumulative impact–specific mitigation is required.

4.3.6 Transportation

Based on the changes to the State CEQA Guidelines initiated by the passage of Senate Bill 743, a project's impact on transportation is measured by the amount of vehicle miles traveled (VMT) that would be generated. By its nature, VMT is inherently a cumulative issue, as it is not likely that any single project would be large enough to prevent the region or state from meeting its VMT reduction targets, which correlate to the state's GHG reduction targets. Rather, a project's individual VMT contributes to cumulative VMT impacts. However, the proposed project would not result in a substantial increase in VMT; therefore, cumulative impacts related to VMT are not evaluated.

Cumulative impacts on transportation, circulation, and parking could also occur if the proposed project, when combined with past, present, and probable future projects, would conflict with applicable programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, cumulative impacts could occur if the proposed project, when combined with past, present, and probable future projects, would result in substantial increases in hazards due to geometric design features or incompatible uses, or result in inadequate emergency access. Lastly, a cumulative parking and public access impact could occur when these cumulative projects combine with the proposed project to result in an insufficient parking supply that would lead to a decrease in public coastal access.

4.3.6.1 Geographic Scope

The geographic scope of cumulative analysis for all other issues includes all past, present, and probable future projects identified near the project site that have affected, or would have the potential to affect, the same transit, roadway, bicycle, and pedestrian facilities as the proposed project.

4.3.6.2 Cumulative Effects

Consistency with Applicable Programs, Plans, Ordinances, or Policies Addressing the Circulation System

Cumulative effects on the circulation system, including transit, roadway, pedestrian, and bicycle facilities could occur if past, present, and probable future projects would conflict with a program, plan, ordinance, or policy addressing these facilities. Past projects identified in Table 4-1 would have been required to demonstrate consistency with any program, plan, ordinance, or policy addressing the circulation system. Reasonably foreseeable future projects such as National City Bayfront Projects and Plan Amendments (Cumulative Project No. 1) would include implementation of Segment 5 of the Bayshore Bikeway, which is a bicycle facility identified in applicable plans, including the San Diego Regional Bike Plan and National City Bicycle Master Plan. Other present and probable future projects within the cumulative study area would be required to demonstrate consistency with programs, plans, ordinances, and policies related to transit, roadway, pedestrian, and bicycle facilities. Therefore, cumulative effects from past, present, and probable future projects would not be significant.

Hazards Due to Geometric Design Features and Incompatible Uses

Of the projects listed in Table 4-1. National City Bayfront Projects and Plan Amendments (Cumulative Project No. 1) is the only project that involves modifications and improvements to transportation facilities within the geographic scope, some of which could include geometric design hazards or introduce incompatible uses.

Given the National City Bayfront Projects and Plan Amendments has already undergone environmental review and the associated EIR certified, it is anticipated that any roadway or bike path constructed under the plan would comply with applicable design standards and avoid geometric features that could pose hazards to the public. Any temporary roadway and sidewalk closures would occur in accordance with existing City requirements to ensure that safe alternative means of pedestrian, bicycle, and vehicle access are provided during the temporary closures. Therefore, cumulative effects from past, present, and probable future projects would not be significant.

Emergency Access

None of the past, present, and probable future projects from Table 4-1 within the geographic scope have included or would include components that could affect emergency access. However, any temporary roadway closures would occur in accordance with existing City requirements to ensure that adequate emergency access is provided during the temporary closures. Therefore, cumulative effects from past, present, and probable future projects would not be significant.

Parking and Public Coastal Access

Due to the industrial setting of the project vicinity, and the nature of most of the cumulative projects as industrial improvement or redevelopment projects, none of the past, present, or reasonably foreseeable projects listed in

Table 4-1 include components that would result in inadequate parking within the cumulative study area. Construction activities of cumulative projects may temporarily reduce parking availability; however, any temporary loss of parking would not amount to a cumulative parking impact. Therefore, cumulative effects from past, present, and probable future projects would not be significant

4.3.6.3 Project Contribution

As noted above, past, present, and probable future projects identified in Table 4-1 have not resulted in cumulative effects related to inconsistencies with programs, plans, ordinances, and policies addressing the circulation system, including transit, roadway, pedestrian, and bicycle facilities; hazards due to geometric design features and incompatible uses; emergency access; or inadequate parking supply. Therefore, the proposed project would not have the potential to contribute to cumulative impacts related to these issues. As discussed in Section 3.6, Transportation, the proposed project would not result in a substantial increase in VMT. Therefore, VMT generated by construction of the proposed project is not anticipated to contribute to the cumulatively considerable VMT impact.

4.3.6.4 Cumulative Impact Determination

The proposed project's incremental contribution to cumulative impacts related to transportation would be less than cumulatively considerable. No cumulative impact–specific mitigation is required.

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SOURCE: Maxar 2025; Open Street Map 2025

DUDEK

0 1,000 2,000 Feet

FIGURE 4-1

Cumulative Project Locations

Tidelands Avenue Electric Truck Hub

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5 Additional Consequences of Project Implementation

5.1 Introduction

This chapter addresses the potential for additional consequences related to implementation of the proposed Tidelands Avenue Electric Truck Hub Project (project), pursuant to CEQA Guidelines Sections 15126.2(c), (d), (e),[1] and 15128. Specifically, this chapter (1) addresses significant irreversible changes to the environment that would result from implementation of the proposed project; (2) discusses growth-inducing impacts of the proposed project, which pertain to ways in which the proposed project could promote either direct or indirect growth; and (3) discusses the environmental effects of the project that were determined not to be significant during the initial environmental review process.

5.2 Significant Irreversible Environmental Changes

CEQA Guidelines Section 15126.2(d) requires an evaluation of significant irreversible environmental changes that could occur should the project be implemented. Irreversible changes typically fall into three categories:

- Primary impacts, such as the use of nonrenewable resources (i.e., biological habitat, agricultural land, mineral deposits, water bodies, energy resources and cultural resources)
- Secondary impacts, such as highway improvements that provide access to previously inaccessible areas
- Environmental accidents potentially associated with future development under the project

Implementation of the proposed project would not result in significant irreversible impacts on biological habitat, agricultural land, forestry resources, mineral deposits, water bodies, energy resources, or cultural resources. The project would commit the site to a long-term use that supports zero-emissions vehicle (ZEV) freight operations, consistent with regional and statewide sustainability goals. While construction would involve the use of energy and materials, these are typical of urban infrastructure projects and necessary to support the transition away from fossil fuel-based transportation. The inclusion of photovoltaic canopies and a battery energy storage system (BESS) further supports renewable energy use and reduces reliance on nonrenewable resources.

As discussed in Sections 3.2, Energy; 3.4, Hydrology and Water Quality; and 5.5, Effects Found Not to be Significant, of this Draft Environmental Impact Report (EIR), implementation of the project would have less-than-significant impacts on nonrenewable resources, including agricultural and forestry resources, biological resources, mineral resources, hydrology and water quality, energy, or cultural resources.

[1] The requirements of the CEQA Guidelines Section 15126.2(a) and (c) are met in Chapter 3, Environmental Analysis, under each resource discussion. The requirements of CEQA Guidelines Section 15126.2(b) are discussed in Section 5.5, Effects Found Not to Be Significant. Lastly, the proposed project does not meet any of the criteria in CEQA Guidelines Section 15127 requiring a discussion of significant irreversible environmental changes under Section 15126.2(c).

5.3 Significant and Unavoidable Impacts

Pursuant to CEQA Guidelines Section 15126.2(c), an EIR must address any significant environmental impacts, including those that can be mitigated but not reduced to less than significant as a result of implementation of a project. As discussed throughout Chapter 3, Environmental Analysis, of this EIR, the project would not result in any significant and unavoidable impacts. For all environmental issue areas, the project would result in either less-than-significant impacts with mitigation, less-than-significant impacts, or no impact.

5.4 Growth-Inducing Impacts

CEQA Guidelines Section 15126.2(e) requires that an EIR discuss the ways in which a project could directly or indirectly foster economic development, population growth, or additional housing and how that growth could affect the surrounding environment. Direct growth inducement would result if a project were to, for example, involve construction of new housing. Indirect growth might occur if a project were to establish substantial new permanent employment opportunities that would stimulate the need for additional housing, utilities, and public services. Similarly, a project would indirectly induce growth if it were to remove an obstacle to additional development, such as a constraint on a required public service or utility. A project proposing to expand water supply capabilities in an area where limited water supply has historically restrained growth would be considered growth inducing.

This section discusses the characteristics and consequences of the project that may encourage or facilitate activities that could significantly affect the environment, either individually or cumulatively. However, the following analysis does not assume that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment (14 CCR 15126.2[e]). Rather, Chapter 3, Environmental Analysis, and Chapter 4, Cumulative Impacts, discuss the adverse impacts on resources resulting from project implementation, including any impacts that would be caused by cumulative conditions.

5.4.1 Foster Economic Growth

The project is intended to provide convenient electrical charging for ZEV trucks operating at marine terminals and associated facilities in the vicinity, in alignment with the San Diego Unified Port District's (District's) Maritime Clean Air Strategy (MCAS) and the California Sustainable Freight Action Plan. While the facility may be publicly accessible and could accommodate other electric vehicles, its primary purpose is to support drayage operations associated with marine terminals. The inclusion of a convenience store and associated amenities may also generate limited employment opportunities and commercial activity. However, these effects are expected to be incremental and consistent with existing industrial and maritime land uses.

5.4.2 Foster Population Growth

The project would not result in the construction of housing, which is prohibited on District property under the Public Trust Doctrine, and would not increase the City's population in a manner that would necessitate the construction of additional housing. Although construction of the proposed project would provide new temporary jobs, the labor force would be drawn from existing residents of the City and surrounding areas. Therefore, the project would not result in the construction of additional housing, either directly or indirectly, and, as such, would not be growth inducing as a result of new housing.

5.4.3 Removal of Obstacles to Population Growth

The project would not remove physical or regulatory obstacles to population growth. It does not involve the extension of infrastructure (e.g., water, sewer, roads) into undeveloped areas, nor does it change land use designations or zoning to allow for residential development, which is prohibited on District property under the Public Trust Doctrine. The proposed project would not require a Port Master Plan (PMP) amendment or infrastructure upgrades beyond the boundaries of the project site and, therefore, would not result in the removal of obstacles to growth.

5.5 Effects Found Not to Be Significant

Pursuant to CEQA Guidelines Section 15063, the District prepared an Environmental Initial Study Checklist (Appendix A) that determined that effects related to aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, greenhouse gas (GHG) emissions, land use and planning, mineral resources, noise, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire would not be significant. In addition, the District determined through the Initial Study Environmental Checklist that the project would have a less-than-significant impact or no impact on certain specific issue areas within air quality, energy, hazardous materials, hydrology and water quality, and transportation as discussed in each of the resource impact discussion sections of Chapter 3, Environmental Analysis. In accordance with CEQA Guidelines Section 15128, a brief explanation indicating the reasons for the conclusion of non-significance are discussed below.

5.5.1 Aesthetics

5.5.1.1 Adverse Effect on a Scenic Vista

The PMP identifies Vista Areas, defined as points of natural visual beauty, photo vantage points, and other panoramas. The project is in Planning District 5, National City Bayfront, of the PMP. There is only one Vista Area in Planning District 5, located at Pepper Park facing southwest across the Sweetwater Channel and toward the San Diego Bay National Wildlife Refuge. Due to distance and the developed nature of the surrounding areas, the project site would not impact this scenic vista. The next closest designated scenic vista to the project site is within Planning District 7, Chula Vista Bayfront, approximately 2.3 miles south of the project site. Due to distance and the developed nature of the surrounding areas, the project site would not impact this scenic vista. No scenic vistas or viewsheds are identified in the City of National City General Plan.

The National City Bayfront Projects and Plan Amendments EIR identify a view corridor at the existing terminus of Marina Way, looking south through the site toward the Pier 32 Overlook and marina (San Diego Unified Port District 2022). The project site is located approximately 1 mile north of this view corridor and would not impact the views through the view corridor toward the Pier 32 Overlook and marina looking south. **No impact** to scenic vistas would occur.

5.5.1.2 Scenic Resources Along a State Scenic Highway

State Route (SR) 75 is an officially designated state scenic highway, which is located approximately 2.3 miles to the west of the project site across San Diego Bay. Due to distance and the developed nature of the surrounding

areas, the project site is not visible from SR-75. Therefore, the project would not substantially damage scenic resources within a state scenic highway and **no impact** would occur.

5.5.1.3 Conflicts with Existing Zoning or Other Regulations Governing Scenic Quality

Per California Public Resources Code (PRC) Section 21071, an "urbanized area" is defined as "(a) An incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons. [or] (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." The project site is located in the City of National City, which has a population of 56,173 persons as of the 2020 census (U.S. Census Bureau 2020). National City is contiguous with the City of San Diego, which has a population of 1,386,932 as of the 2020 census (U.S. Census Bureau 2020). As such, the project site is considered to be located in an urbanized area.

The project would include ZEV truck charging, a photovoltaic canopy, a BESS, convenience store, and infrastructure improvements. The project site has the land use designation of Industrial, Marine Related as described within the National City Bayfront: Planning District 5 of the PMP, or amendments thereto. The project would be consistent with the land use designation and, as described in Section 5.5.1.1, Adverse Effect on a Scenic Vista, would not result in impacts to scenic vistas identified in the PMP. Construction of the project would result in temporary construction -related activity associated with the use of standard construction equipment. Operationally, the project would be visually consistent with the surrounding industrial development. The project would not conflict with any regulations governing scenic quality and impacts would be **less than significant**.

5.5.1.4 Light and Glare

The project site consists of an asphalt lot surrounded by existing industrial development. The surrounding land uses contain several sources of light and glare associated with industrial maritime activities and adjacent U.S Navy operations. Existing sources include security lighting, operational lighting, street lighting, light and glare from cars, and building lights. The site is currently used in an ad-hoc manner by Pasha Automotive roll–on/roll-off (RoRo) overflow, e.g., automobile storage. Implementation of the proposed project would include new permanent light sources on site, from new structures and security lighting. Area lighting would be required to follow industry-accepted lighting practices and lighting levels, including shielding lights from spilling onto adjacent properties. The project's new sources of light and glare would not be substantial or out of keeping with light and glare associated with surrounding uses and existing activities. As such the project would not adversely affect day or nighttime views in the area and impacts would be **less than significant**.

5.5.2 Agriculture and Forestry Resources

5.5.2.1 Important Farmland

According to the California Department of Conservation's California Important Farmland Finder, the project site and surrounding land is classified as "Urban and Built-Up Land," which does not contain land designated or previously designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (DOC 2025a). **No impact** would occur.

5.5.2.2 Williamson Act Contracts or Agricultural Zoning

The project site has the land use designation of Industrial, Marine Related, as described within the National City Bayfront: Planning District 5 of the PMP. Additionally, the project site is not subject to a Williamson Act Contract (DOC 2025b). As such, the project would not conflict with existing zoning for agricultural use or land under a Williamson Act contract. **No impact** would occur.

5.5.2.3 Conflict with Forest Land or Timberland Zoning

The project site has the land use designation of Industrial, Marine Related, and is surrounded by primarily industrial uses. The project site and surrounding land is not zoned for forestland, timberland, or timberland production. **No impact** would occur.

5.5.2.4 Loss or Conversion of Forest Land

The project site has the land use designation of Industrial, Marine Related, and does not contain forest land. Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use. **No impact** would occur.

5.5.2.5 Other Changes Involving the Conversion of Farmland or Forest Land

The project site and surrounding land is classified as "Urban and Built-Up Land," which does not contain land designated or previously designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (DOC 2025a). The project would not involve changes to the existing environment that would result in the indirect conversion of Important Farmland or forestland. **No impact** would occur.

5.5.3 Air Quality

5.5.3.1 Consistency with the Applicable Air Quality Plan

The San Diego Air Pollution Control District (SDAPCD) and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plans for attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) in the San Diego Air Basin (SDAB), specifically, the State Implementation Plan (SIP) and Regional Air Quality Strategy (RAQS).[2] The federal ozone (O_3) attainment plan, which is part of the SIP, was adopted in 2020. The SIP includes a demonstration that current strategies and tactics will attain acceptable air quality in the SDAB based on the NAAQS. The RAQS was initially adopted in 1991 and is updated every 3 years (most recently in 2022). The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for O_3. The SIP and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and

[2] For the purpose of this discussion, the relevant federal air quality plan is the O_3 attainment plan (SDAPCD 2022). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the SDAB.

SANDAG growth projections are based on population, vehicle trends, and land use plans developed by San Diego County and the cities in the County as part of the development of their general plans.

As mentioned above, the SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and by the County as part of development of their general plans. As such, projects involving development consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS. However, if a project involves development that is greater than that anticipated in the local plan and/or SANDAG's growth projections, that project might conflict with the SIP and RAQS, and may contribute to a potentially significant cumulative impact on air quality.

The proposed project would not change the use, or use designation, of the site and activities would be supportive and consistent with the industrial maritime activities surrounding the site. As such, the project would be consistent with the PMP. The convenience store is anticipated to employ up to seven people. The SANDAG Series 15 Growth Forecast shows 38,802 jobs within the City in 2022 and 39,155 jobs in 2029, or an additional 44 jobs per year. The projects seven employees would be within the growth projections of the City. The project would not conflict with the RAQS and SIP. Therefore, a less-than-significant impact would result.

The Maritime Clean Air Strategy (MCAS) is a strategic planning document, adopted by the Board of Port Commissioners (Board) on October 12, 2021, that identifies short-term and long-term goals and objectives intended to facilitate achievement of a clean, sustainable, and modern seaport.[3] The MCAS identifies aspirational goals to reduce baseline air emissions that negatively impact air quality. Diesel Particulate Matter (DPM) is the main toxic air contaminant targeted for reduction by the MCAS.

The MCAS identifies aspirational goals to reduce baseline air emissions from the operation of maritime businesses that negatively impact air quality, primarily the District's two marine cargo terminals (Tenth Avenue Marine Terminal [TAMT] and National City Marine Terminal [NCMT]). Therefore, the goals and objectives of the MCAS specifically target the reduction of DPM from the main sources of emissions from Maritime operations: Heavy-duty Trucks, Rail, Cargo Handling Equipment, Harbor Craft, the District's vehicle fleet and equipment, Shipyards (Maritime Industrial Uses) and Ocean-going Vessels.

Additionally, as the MCAS is a strategy plan, implementation of the MCAS is subject to future Board actions, as well as regular check-ins on a variety of topics including feasibility of implementation.

The MCAS assumes the following conditions and advancements will be in place in support of the successful deployment of zero-emission technologies at the Port of San Diego (Port) and to meet the MCAS' long-term goals:

- **Capability:** The state of technology meets the load, daily mileage, and hours of operations requirements, including cargo movements within the District's marine cargo terminals, and ZEV Class 8 trucks will be in place for cargo transported to and from the District's marine cargo terminals.
- **Infrastructure:** Zero-emission infrastructure will be deployed and in place both within and outside of the San Diego region, with convenient charging locations and efficient charging capability.

[3] It should be noted that MCAS was found exempt from CEQA review pursuant to CEQA Guidelines Section 15262 (Feasibility and Planning Studies). Section 15262 exempts projects "involving only feasibility or planning studies for possible future actions which the agency, board, or commission has not approved, adopted, or funded…." Use of this exemption allows for the avoidance of costly environmental review under CEQA when a study – here, the MCAS – does no more than contain preliminary, non-binding recommendations. Hence, the MCAS is an aspirational plan that does not contain binding requirements.

- **Capital Expenditures:** Procurement costs of zero-emission vehicles and equipment will continue to be offset by grants, subsidies, and other financing mechanisms to help achieve parity with traditionally powered vehicles and equipment. Additionally, it assumes technologies and markets will continue to mature.
- **Commercial Availability:** Commercial availability of vehicles and equipment will have increased, particularly with specialized equipment such as electric top handlers and auto carrier trucks.
- **Education and Training:** There will be an adequate number of trained service personnel to repair and maintain zero-emission equipment and vehicles to ensure that there is no undue disruption of cargo and maritime operations.

While the MCAS focuses on advancing near-term objectives that will help accelerate the deployment of zero- and near-zero-emission technologies, the MCAS envisions these advancements being in place to support successful implementation of the MCAS goals and there will be contributions from other parties.

In alignment with its Vision Statement - *"Health Equity for All"* – the MCAS is intended to guide future District decision-making and "provide a planning framework for potential future actions that may be implemented to achieve the goals and objectives identified in the MCAS." The MCAS also recognizes that various means may be employed or pursued by the District to reduce emissions (including the adoption of regulatory standards, purchase of equipment, or strategic partnerships). Accordingly, an individual project would not necessarily impede or obstruct achievement of the MCAS's goals or the ability of the District to consider, approve, and implement projects and/or initiatives toward achievement of the MCAS goals and objectives. The MCAS also anticipates that "technological advances will result in additional options for implementation toward achievement of near-term goals and objectives." To that end, the MCAS represents a strategy to be pursued by the District, through a variety of future means, measures, projects, and initiatives.[4]

Table 5-1 includes an analysis of the applicable goals and policies related to heavy-duty trucks regarding whether the proposed project would conflict with or obstruct implementation of those MCAS[5] goals and objectives. The proposed project would not conflict with or obstruct implementation of the MCAS.

Table 5-1. Tidelands Avenue Electric Truck Hub – Maritime Clean Air Strategy Consistency Analysis

Goal	Consistency Finding
Long-Term Goal for Trucks: In advance of the State's goals identified in Executive Order No. N79-20, attain 100% zero-emission truck trips by 2030 for all trucks that call to the District's two marine cargo terminals.	**Consistent.** The proposed project includes the provision of heavy-duty truck charging infrastructure along with optional truck leasing provisions to address cost barriers to small fleets and independent truck owners to aid the transition away from diesel powered trucks to battery electric trucks. The proposed project is not in conflict with and does not obstruct achievement of the long-term goal.

[4] The MCAS defines "strategy" as a "generic term that encompasses plans, projects, programs, partnership, and various other efforts and initiatives that will help achieve a goal."

[5] The 2018 update to the CEQA Guidelines makes clear that analysis of a project's consistency with applicable plans should not just be on conflicts with the plan but whether a conflict could result in a significant physical impact. The conflict itself is not an impact. Again, the proposed project does not conflict with the MCAS (or the CERP).

Table 5-1. Tidelands Avenue Electric Truck Hub – Maritime Clean Air Strategy Consistency Analysis

Goal	Consistency Finding
Truck	
Truck Goal 1: Improve the air quality in the Portside Community by accelerating the implementation of zero emission/near zero emission trucks.	**Consistent.** The proposed project includes the provision of heavy-duty truck charging infrastructure along with optional truck leasing provisions to address cost barriers to small fleets and independent truck owners to aid the transition away from diesel powered trucks to battery electric trucks. The proposed project is not in conflict with and does not obstruct achievement of Goal 1.
Truck Objective 1A: Prepare a heavy-duty truck transition plan by June 30, 2022 with ZE heavy-duty truck transition benchmarks of 40% of the Port's annual truck trips by June 30, 2026 and 100% by December 31, 2030 that includes the following: i. A compilation of all foreseeable tasks and their timelines including: charging infrastructure development; planning and implementation of a short-haul truck program; and creation of a truck registry. ii. Development of key policy concepts such as additional revenue source mechanisms and guidelines to utilize them; and new lease provisions for ZE truck requirements. This section should include the process required for consideration and adoption by the Board as well as their projected hearing dates. iii. Compilation and analysis of truck data (e.g. truck ownership, delivery distances within San Diego region and beyond) needed to prepare the transition plan.	This Objective has been implemented and is complete. As such, the project cannot conflict with and does not obstruct achievement of Objective 1A.
Truck Objective 1B: By the end of 2022, District staff will develop and present a short-haul, on-road, Zero Emission Truck Program for the Board's consideration that includes at least one collaborating trucking company and that targets having the necessary charging infrastructure in place by 2024, in order to displace approximately 65,000 diesel vehicle miles traveled.	**Consistent.** District staff have worked with a variety of trucking fleets and tenants to encourage adoption of zero-emissions trucks. Staff developed an incentive program to offset the high cost of zero-emissions trucks and charging infrastructure. However, the District has not been successful in deploying electric trucks nor charging for electric trucks to date. The proposed project, if approved, would provide charging infrastructure and address cost barriers, especially for small fleets and independent truck owners, with its Trucking as a Service (TaaS) leasing model.
Truck Objective 1C: Coordinate with the California Air Resources Board as they continue to develop the Advanced Clean Fleet Regulation regarding the transition to zero emission trucks to better understand associated State forecasts and forthcoming rulemaking.	This Objective has been implemented and is complete. As such, the project cannot conflict with and does not obstruct achievement of Objective 1C.
Truck Objective 1D: In collaboration with the California Air Resources Board, the District will utilize a truck registry or other system to summarize annual truck	This Objective has been implemented and is complete. As such, the project cannot conflict with and does not obstruct achievement of Objective 1D.

Table 5-1. Tidelands Avenue Electric Truck Hub – Maritime Clean Air Strategy Consistency Analysis

Goal	Consistency Finding
trips to the District's marine cargo terminals and measure progress to achieve District goals.	
Truck Objective 1E: Provide status report to the Board of Port Commissioners with recommendations on zero emission truck technologies, as well as an evaluation of potential impacts to small fleets and/or independent truck drivers, as part of a biennial emissions reporting to better understand the transition zero emission truck technology.	**Consistent.** District staff presented the first biennial status report to the Board in December 2023. The second biennial report will be provided in 2025. The proposed project is not in conflict with and does not obstruct achievement of Objective 1E.
Truck Goal 2: Facilitate the deployment of infrastructure to support the transition to zero emission truck trips to the District's marine cargo terminals.	**Consistent.** The proposed project includes the provision of heavy duty truck charging infrastructure along with optional truck leasing provisions to address cost barriers to small fleets and independent truck owners to aid the transition away from diesel powered trucks to battery electric trucks. The proposed project is not in conflict with and does not obstruct achievement of Goal 2.
Truck Objective 2A: Within the fourth quarter of calendar year 2022, present a concept plan to the Board for its consideration that identifies four potential public-facing medium-duty/heavy-duty charging locations within the San Diego Region to support deployment of zero emission trucks, which may include locations in close proximity to or on the TAMT and/or the National City Marine Terminal.	This Objective has been implemented and is complete. As such, the project cannot conflict with and does not obstruct achievement of Objective 2A. The following actions have been completed: May 2022 – District issues Request for Information – seeking info on development interest, business models, site preferences, etc.) April 2023 – District issues Request for Proposals – using information from RFI, District refined concept and issued an RFP November 2023 – Staff presents to Board on top two proposals March 2024 – Board selects Skychargers LLC and authorizes staff to enter into an Exclusive Negotiating Agreement September 2024 – Board receives preliminary project review presentation and authorizes staff to commence CEQA review. Moreover, the proposed project is a direct result of these efforts and goes beyond identification of sites and is attempting to implement a heavy-duty truck charging infrastructure project.
Truck Objective 2B: Collaborate and coordinate with community residents, stakeholders, and agencies to ensure that the medium-duty/heavy-duty zero emission truck charging facilities identified in Objective 2A are aligned with and connect to the region's larger zero emission vehicle charging infrastructure system.	This Objective has been implemented and is complete. As such, the project cannot conflict with and does not obstruct achievement of Objective 2B. A Memorandum of Agreement between the District and California Department of Transportation (Caltrans) was entered into in June 2023. The Parties

Table 5-1. Tidelands Avenue Electric Truck Hub – Maritime Clean Air Strategy Consistency Analysis

Goal	Consistency Finding
	agree to work cooperatively toward the mutual goal and shared vision of developing sustainable transportation and freight projects to support the San Diego region and District operations, that benefit underserved communities and promote climate action. These projects include but are not limited to: Harbor Drive 2.0 and nearby roadways, M5, and ZEV and Truck Infrastructure, and projects and programs identified in transportation planning efforts led and supported by the District and Caltrans. The Parties also agree to work towards a more comprehensive agreement that will outline future terms and conditions of collaboration between the Parties, to deliver transportation improvements that utilize materials, funds, resources or services of both Caltrans and the District. The future comprehensive agreement is intended to cover all phases of the project development process of various types of transportation improvements, in which Caltrans and the District will partner and collaborate.
Truck Goal 3: Support the designated truck route to avoid truck impacts on the local community.	**Consistent.** The District has an established Truck Route Violation Hotline for residents to express concerns over truck traffic issues or other issues related to marine terminals. A recorded message is played in English and Spanish, and then the caller can leave a detailed message regarding truck issues. The caller is asked to leave details such as the name of the trucking company and the vehicle license number or container number. Additionally, the hotline will also track TAMT noise complaints related to cargo and construction activities. Hotline No.: 619.686.8100. The proposed project is not in conflict with and does not obstruct achievement of Goal 3.
Truck Objective 3A: Work with partners to continue advancement of the connected and flexible freight and transit haul route concept to provide more efficient freeway access and encourage truck drivers to avoid residential neighborhoods by leveraging technology to support dedicated lanes and signal prioritization.	**Consistent.** The proposed project is located along the designated truck route in National City. The District remains committed to realizing the redevelopment of Harbor Drive 2.0 and is a member of SANDAG's Project Development Team that is advancing the project through final construction drawing development.

Community Emissions Reduction Plan

The Portside Community's[6] Community Emissions Reduction Plan (CERP) was adopted by SDAPCD on July 16, 2021, and CARB on October 14, 2021. The CERP itself notes that it "is a plan for action to reduce air pollutant emissions and community exposure to those emissions in the Portside Community." The CERP specifies aspirational goals and a variety of actions and identifies entities (governmental or organization) participating in the implementation of those actions. The goals in the CERP are aspirational and are intended to guide the community members, businesses, organizations, and government agencies partnering in the implementation of this CERP to support health and environmental justice in the Portside Community. While there might not be a clear path to reach some of these goals, the goals identify the direction in which the community wants to go to achieve emission reductions beyond regulatory requirements. As technology evolves and data continues to be collected, the goals in the CERP may be adjusted. Although the District's participation in the CERP and its implementation is important, a significant majority of the CERP's goals and actions, as enumerated, are not applicable to the District (or proposed to be implemented by the District). For instance, a substantial component of the CERP is premised on future regulatory or policy action by the SDAPCD (and CARB) and expanding and evolving its enforcement program to increase compliance rates, increase outreach efforts, and maximize compliance (see Chapters 5 and 6 of the CERP).[7] To provide full public disclosure and informed participation, an analysis of whether the proposed project would conflict with or obstruct implementation of certain CERP goals and actions is presented below. The analysis focuses on those CERP goals and actions that: (1) are applicable to the proposed project, and (2) the District has been identified as a participant in achieving.

Based on the environmental setting and project description (Chapter 2 of Draft EIR), Table 5-2 discusses whether the proposed project conflicts with or obstructs implementation of the goals, actions, and strategies of the CERP so that the public and Board have complete and accurate information regarding the proposed project's likely near-term and long-term impacts, if any. Merely being inconsistent with a CERP goal, action, or strategy would not necessarily be considered a significant impact under CEQA; rather, the inconsistency must result in a substantial adverse effect on the environment. No inconsistencies have been identified that would result in a significant impact on the environment.

Table 5-2. Tidelands Avenue Electric Truck Hub – Portside Community Emissions Reduction Plan Consistency Analysis

Goal	Consistency Finding
Overall Goals	
GOAL 1. By 2031, reduce Diesel PM from 2018 levels by 80% in ambient air at all Portside Community locations.	**Consistent.** The proposed project includes the provision of heavy-duty truck charging infrastructure along with optional truck leasing provisions to address cost barriers to small fleets and independent truck owners to aid the transition away from diesel powered trucks to battery electric trucks. If successful, the project would result in emission reduction within the Portside Community.

[6] The Portside Environmental Justice Neighborhoods (Portside Community) generally includes Barrio Logan, Logan Heights and Sherman Heights in the City of San Diego and West National City in the City of National City. More specifically, it includes the following 12 census tracts: 6073005000, 6073004900, 6073003902, 6073003601, 6073003901, 6073005100, 6073003603, 6073004000, 6073003502, 6073021900, 6073004700, and 6073011602.

[7] In fact, consistent with the CERP, on November 4, 2021, the SDAPCD updated Rule 1210 to lower the health risk threshold from 100 per million to 10 per million.

Table 5-2. Tidelands Avenue Electric Truck Hub – Portside Community Emissions Reduction Plan Consistency Analysis

Goal	Consistency Finding
	The proposed project is not in conflict with and does not obstruct achievement of Goal 1.
GOAL 2. Medium and Heavy Duty trucks servicing Portside Community to be 100% ZEV 5 years ahead of the California state requirements.	**Consistent.** The proposed project includes the provision of heavy-duty truck charging infrastructure along with optional truck leasing provisions to address cost barriers to small fleets and independent truck owners to aid the transition away from diesel powered trucks to battery electric trucks. If successful, the project would result in emission reduction within the Portside Community. The proposed project is not in conflict with and does not obstruct achievement of Goal 2.
GOAL 3. Establish ZEV HD/MD truck charging infrastructure in Portside, by specified dates in Action E1, with 4 sites operational by 2026.	**Consistent.** The proposed project includes the provision of heavy-duty truck charging infrastructure along with optional truck leasing provisions to address cost barriers to small fleets and independent truck owners to aid the transition away from diesel powered trucks to battery electric trucks. If successful, the project would result in emission reduction within the Portside Community. While not anticipated to be operation in 2026, the proposed project is not in conflict with and does not obstruct achievement of Goal 3.
GOAL 4. Reduce emissions from HD/MD trucks servicing indirect sources by 100% 5 years in advance of regulatory requirements.	**Consistent.** The proposed project includes the provision of heavy-duty truck charging infrastructure along with optional truck leasing provisions to address cost barriers to small fleets and independent truck owners to aid the transition away from diesel powered trucks to battery electric trucks. If successful, the project would result in emission reduction within the Portside Community and offer a means to reduce indirect sources of emissions from heavy-duty trucks. The proposed project is not in conflict with and does not obstruct achievement of Goal 4.
GOAL 5. By December 2021, APCD to present the cumulative cancer risk for Portside Communities from Health Risk Assessments and modeling of cumulative risk (including freeways, rail, vessels, stationary sources, etc.) to inform Goal #6. APCD can achieve this modeling goal with CARB assistance and input from the Portside Community Steering Committee including methodology and input data.	**This Goal has been implemented and is complete.** As such, the project cannot conflict with and does not obstruct achievement of Goal 5.
GOAL 6. By February 2022, establish an estimated cancer risk reduction goal based on the modeling that is done in Goal #2. Estimated cancer risk at all census tracts in Portside Community from locally generated emissions, including both	**This Goal has been implemented and is complete.** As such, the project cannot conflict with and does not obstruct achievement of Goal 6.

Table 5-2. Tidelands Avenue Electric Truck Hub – Portside Community Emissions Reduction Plan Consistency Analysis

Goal	Consistency Finding
stationary and mobile sources, to meet goals of ___/ million by 2026 and ___ /million by 2031.	
GOAL 7. Conduct a Health Risk Assessment (HRA) at the Port's two marine cargo terminals to establish an updated baseline that relies on the most recent source characterization and activity from the Port's 2019 Emissions Inventory to inform aspirational goals in support of public health community priorities: 2) By October 2021, identify existing health risk levels generated from the District's TAMT and the NCMT for Diesel Particulate Matter (DPM) and other Toxic Air Contaminant (TAC) emissions. a. Reduce Health Risk: The HRA may be used to inform an aspirational goal of reducing cancer risk b. Reduce DPM Emissions: The HRA may be used to inform an aspirational emission reduction goal c. Assist the San Diego Air Pollution Control District (SDAPCD) and the California Air Resources Board (CARB) with preparing a cumulative cancer risk analysis for the AB 617 Portside Community by providing them with the District's HRA (October 2021) and the other operational related information.	**This Goal has been implemented and is complete.** As such, the project cannot conflict with and does not obstruct achievement of Goal 7.
GOAL 8. By 2026 reduce cancer risk below 10/million for each permitted stationary source, including portable equipment, in the Portside Environmental Justice Community.	**Not applicable.** The proposed project attempts to reduce a mobile source of pollution and will not result in a permitted stationary source of air pollution.
GOAL 9. By 2031 complete Harbor Drive 2.0 truck freight improvements, including enforcement and signage of truck route for National City.	**Consistent.** The District has an established Truck Route Violation Hotline for residents to express concerns over truck traffic issues or other issues related to marine terminals. A recorded message is played in English and Spanish, and then the caller can leave a detailed message regarding truck issues. The caller is asked to leave details such as the name of the trucking company and the vehicle license number or container number. Additionally, the hotline will also track Tenth Avenue Marine Terminal noise complaints related to cargo and construction activities. Hotline No.: 619.686.8100. The proposed project is located along the designated truck route in National City. The District remains committed to realizing the redevelopment of Harbor Drive 2.0 and is a member of SANDAG's Project Development

Table 5-2. Tidelands Avenue Electric Truck Hub – Portside Community Emissions Reduction Plan Consistency Analysis

Goal	Consistency Finding
	Team that is advancing the project through final construction drawing development. The proposed project is not in conflict with and does not obstruct achievement of Goal 9.
GOAL 10. By 2031 increase tree canopy in the Portside Community to 35%.	**Not applicable.** The proposed project attempts to reduce a mobile source of pollution and will not result in the reduction of tree canopy in the Portside Community, a small green, open space will be located on the site and provide stormwater infiltration.
GOAL 11. Develop a new vision for park/green space for the Portside Community to increase park space by 30% by December 2022.	**Not applicable.** The proposed project attempts to reduce a mobile source of pollution and will not result in a permitted stationary source of air pollution.
Heavy Duty Truck Strategies	
Action E1: Advance the deployment of heavy-duty on-road electric trucks to demonstrate operational feasibility and reduce emissions within the Portside Community and other disadvantaged communities.	**Consistent.** The proposed project includes the provision of heavy-duty truck charging infrastructure along with optional truck leasing provisions to address cost barriers to small fleets and independent truck owners to aid the transition away from diesel powered trucks to battery electric trucks. If successful, the project would result in emission reduction within the Portside Community and offer a means to reduce indirect sources of emissions from heavy-duty trucks. The proposed project is not in conflict with and does not obstruct achievement of Action E1.
Action E3: Support dedicated truck route and avoid truck impacts to local community.	**Consistent.** The District has an established Truck Route Violation Hotline for residents to express concerns over truck traffic issues or other issues related to marine terminals. A recorded message is played in English and Spanish, and then the caller can leave a detailed message regarding truck issues. The caller is asked to leave details such as the name of the trucking company and the vehicle license number or container number. Additionally, the hotline will also track TAMT noise complaints related to cargo and construction activities: Hotline No.: 619.686.8100. The proposed project is not in conflict with and does not obstruct achievement of Action E3.

As evaluated above, the proposed project would not conflict with applicable air quality plans. Therefore, a **less-than-significant** impact would result.

5.5.3.2 Odors

Construction

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed project. Potential odors produced during proposed construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than 5 minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. Such odors would be temporary, short-term, intermittent in nature, and disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be **less than significant.**

Operation

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The proposed project would not include operations associated with odor complaints. Therefore, proposed project operations would result in an odor impact that would be **less than significant**.

5.5.4 Biological Resources

5.5.4.1 Sensitive Species

The project site is within disturbed land that has been previously graded and paved. While the project site contains some landscape trees along the eastern border of the site, the site is subject to industrial maritime activities and does not contain suitable habitat for species identified as a candidate, sensitive, or special status species. Therefore, impacts would be **less than significant**.

5.5.4.2 Sensitive Habitats

The project site is within disturbed land with some landscape trees along the eastern border. The site consists of disturbed and developed land, which is not considered sensitive to local, state, or federal agencies; therefore, **no impact** would occur.

5.5.4.3 Wetlands

The project site is disturbed and does not contain any state or federally protected wetlands. Therefore, the project would result in **no impact** to state or federally protected wetlands.

5.5.4.4 Wildlife Corridors/Native Wildlife Nursery Sites

San Diego Bay is in the path of the Pacific Flyway, a migratory route used by birds. However, the project site is located in a developed area actively used for industrial maritime purposes. The proposed project would change the activities, but not the type of use in the area, and would not interfere with movement of wildlife nor would it affect

wildlife corridors because use would continue to be maritime industrial-related and habitat or other features that might be inviting to birds (such as water bodies, perching or nesting sites, etc.) would not be introduced. Therefore, impacts would be **less than significant**.

5.5.4.5 Local Policies/Ordinances

The applicable local land use plans, policies, ordinances, or regulations of the District protecting biological resources are the PMP, San Diego Unified Port District Code, and the District's Integrated Natural Resource Management Plan (INRMP). The INRMP, managed by the U.S. Navy and the District, intends to protect the San Diego Bay's ecosystem while supporting the ability of the U.S. Navy and the District to achieve their missions and continue functioning within the San Diego Bay (San Diego Unified Port District 2013). Section II of the PMP, Planning Goals, includes Goal XI states that the District will protect, preserve, and enhance natural resources, including natural plant and animal life in the bay as a desirable amenity, and ecological necessity, and a valuable and usable resource. The project site is disturbed and paved and not located in an area with high ecological value. To the minimum extent feasible, several trees (two or three) may be removed to accommodate a new driveway; these trees are landscape trees and would not conflict with any tree preservation policy or ordinance. Additionally, the project would include an approximate 0.15-acre greenspace consisting of grasses and groundcover. The proposed project would not conflict with local policies or ordinances protecting biological resources and impacts would be **less than significant**.

5.5.4.6 Habitat Conservation Planning

The project site is not within any approved local, regional, or state habitat conservation plan boundaries. **No impact** would occur.

5.5.5 Cultural Resources

5.5.5.1 Historical Resources

The site is paved with asphalt with some landscape trees along the eastern border of the site. There are no structures on the site. The project would not impact historic resources defined by CEQA Guidelines Section 15064.5. **No impact** would occur.

5.5.5.2 Archaeological Resources

The majority of the project site is underlain by Made land (fill), with a portion on the east side composed of Huerhuero–Urban land complex human-made land (USDA 2025). The site is entirely previously disturbed including subsurface utilities, former railroad, and existing asphalt. Ground excavation activities would be limited to the repair of existing asphalt, laying of electrical conduit, photovoltaic canopy structural footings, BESS and convenience store foundations, and existing subsurface utilities modifications. A substantial adverse change in the significance of an archaeological resource would not be likely and impacts would be **less than significant**.

5.5.5.3 Human Remains

The project site consists of disturbed asphalt surface. There are no known cemeteries or burials on the project site or immediate area. In the unlikely event that human remains are inadvertently encountered during

ground -disturbing activities, they must be treated consistent with state and local regulations including California Health and Safety Code Section 7050.5, PRC Section 5097.98, and the CEQA Guidelines Section 15064.5(e). In accordance with these regulations, if human remains are found, the county coroner shall be immediately notified of the discovery. No further excavation or disturbance of the location of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the county coroner has determined the appropriate treatment and disposition of the human remains. If the county coroner determines that the remains are, or are believed to be, Native American, he or she shall follow all required protocols according to PRC Section 5097.98. Compliance with these regulations would ensure that impacts to human remains resulting from the project would be **less than significant**.

5.5.6 Energy

5.5.6.1 State or Local Plan for Renewable Energy or Energy Efficiency

The project's construction contractors would be required to demonstrate compliance with applicable regulations, including federal and state requirements for construction equipment. Construction equipment and trucks are required to comply with CARB regulations regarding idling limits of 5 minutes per occurrence. Off-road emissions standards would also increase equipment efficiencies as they are phased in over time and as less-efficient equipment is phased out of construction fleets. These regulatory standards achieve energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these requirements are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Thus, the project's construction equipment would be consistent with the energy standards applicable to construction equipment, including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency.

Regarding project operations, the project would comply with CCR Title 24, Part 6, per state regulations. In accordance with CCR Title 24, Part 6, the project would have (a) sensor-based lighting controls—for fixtures located near windows, the lighting would be adjusted by taking advantage of available natural light; and (b) efficient process equipment—improved technology offers significant savings through more efficient processing equipment. CCR Title 24, Part 11, contains voluntary and mandatory energy measures that are applicable to the project under the California Green Building Standards Code. In accordance with CCR Title 24, Part 11, mandatory compliance, the project would have (a) 50% of its construction and demolition waste diverted from landfills; (b) mandatory inspections of energy systems to ensure optimal working efficiency; (c) low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards; and (d) a 20% reduction in indoor water use. Compliance with all of these mandatory measures would decrease the consumption of electricity, natural gas, and petroleum. Furthermore, the project's design to facilitate the transition to electric trucks and charge them using renewable energy supports the state and District goals to reduce fuel consumption and GHG emissions. Therefore, impacts would be **less than significant**.

5.5.7 Geology and Soils

5.5.7.1 Rupture of a Known Earthquake Fault

While the region is a seismically active region, according to the California Earthquake Hazards Zone Application, the project site is not within an earthquake zone (DOC 2025c). The closest fault is the Newport–Inglewood–Rose Canyon Fault Zone, more than 2 miles from the site. Because there are no faults within the project site, ground

disturbance activities associated with the proposed project are not likely to influence the potential for fault rupturing. Therefore, construction and operation of the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death from known fault rupture, and impacts would be **less than significant**.

5.5.7.2 Strong Seismic Ground Shaking

The site is located in a seismically active region of Southern California. However, the proposed project would not include any characteristics that might exacerbate the potential for strong seismic ground shaking. The project would contain no habitable structures or other structural development intended for human occupancy. The project would be built in compliance with the California Building Code Title 24, which outlines building requirements and safety standards to address potential seismic activity. Compliance with applicable seismic design requirements would reduce the potential risk to both people and structures with respect to strong seismic ground shaking. Therefore, impacts would be **less than significant**.

5.5.7.3 Liquefaction and Other Seismically Related Ground Failure

Liquefaction is the phenomenon that occurs when ground shaking causes loose soils to lose strength and act like viscous fluid. According to the San Diego County, California, Multi-Jurisdictional Hazard Mitigation Plan, the project site is within a liquefaction zone (County of San Diego 2023). Standard design and construction techniques such as spread footings, mat foundations, or other design considerations would be incorporated per California Building Code requirements, minimizing hazards due to liquefaction. A geotechnical study will be prepared for the project and will identify the project's existing geological conditions, including liquefaction potential as well as the specifications and applicable building code requirements necessary to adhere to. Compliance with applicable design requirements for the rated liquefaction characteristics of the site would reduce the potential risk to both people and structures. Therefore, construction and operation of the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death from ground failure including liquefaction, and impacts would be **less than significant**.

5.5.7.4 Landslides

Landslides typically occur on moderate to steep slopes that are affected by such physical factors as slope height, slope steepness, shear strength, and orientation of weak layers in the underlying geologic units. The project site and surroundings are generally flat with soils stabilized by development and landscaping. According to the U.S. Geological Survey's U.S. Landslide Inventory and Susceptibility Map, the project site has a very low landslide potential (USGS 2025). Therefore, the proposed project is not anticipated to expose people or structures to landslide risks, and **no impact** would occur.

5.5.7.5 Soil Erosion or Loss of Topsoil

Construction of the project would require only existing asphalt repair and minimal earthwork to lay electrical conduit and modify subsurface utilities and install structural footings for the photovoltaic canopies and the convenience store. Operations would continue on asphalt. Therefore, construction and operation of the proposed project would not directly or indirectly cause potential substantial adverse effects, including substantial soil erosion or the loss of topsoil, and impacts would be **less than significant**.

5.5.7.6 Unstable Geologic Units or Soil

The project site is within an area of very low landslide potential. However, because lateral spreading is a secondary seismic effect of liquefaction, and the project site is located in an area with potential for liquefaction, there is potential for lateral spreading to occur. A geotechnical study will be prepared for the project and will identify the project's existing geological conditions, including site stability potential as well as the specifications and applicable building code requirements necessary to adhere to. Compliance with applicable design requirements for the rated liquefaction and site stability characteristics of the site would reduce the potential risk to both people and structures. Therefore, construction and operation of the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death from unstable soil, and impacts would be **less than significant**.

5.5.7.7 Expansive Soil

Expansive soils are clay-based and tend to increase in volume due to water absorption and decrease in water volume due to drying. A geotechnical study will be prepared for the project and will identify the project's existing geological conditions, including the underlying soil as well as the specifications and applicable building code requirements necessary to adhere to. Compliance with applicable design requirements for the rated expansive characteristics of the site would reduce the potential risk to both people and structures. Therefore, construction and operation of the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death from expansive soil, and impacts would be **less than significant**.

5.5.7.8 Septic Systems

No septic tanks or alternative wastewater disposal systems that might affect soils are included as part of the proposed project; therefore, **no impact** would occur.

5.5.7.9 Paleontological Resources and Unique Geologic Features

The majority of the project site is underlain by Made land (fill), with a portion on the east side composed of Huerhuero–Urban land complex human-made land (USDA 2025). Because it is previously developed, the subsurface has previously been disturbed and has a reduced likelihood of the presence of paleontological resources. The site is entirely previously disturbed including subsurface utilities, former railroad, and existing asphalt. Ground excavation activities would be limited to the repair of existing asphalt, laying of electrical conduit, BESS, photovoltaic canopy and convenience store foundations, and existing subsurface utilities modifications. A substantial adverse change in the significance of an archaeological resource would not be likely and impacts would be **less than significant**.

5.5.8 Greenhouse Gas Emissions

5.5.8.1 Greenhouse Gas Emissions and Conflicts with Plans or Policies Intended to Reduce Greenhouse Gas Emissions

Applicable plans for the proposed project include CARB's Scoping Plan, SANDAG's RTP/SCS, and the San Diego Unified Port District CAP, Green Port Program, and MCAS. As described in Appendix C of this EIR, Air Quality, GHG, and Energy Technical Report, the project would not potentially conflict with the CARB Scoping Plan, SANDAG

Regional Plan, District CAP, District Green Port Program, or District MCAS, each of which was adopted for the purpose of reducing emissions including GHG. The project supports regional and state climate goals by facilitating the transition to zero-emissions heavy-duty trucks and incorporating renewable energy infrastructure, including solar photovoltaic canopies and a BESS. The environmental co-benefits of facilitating the transition away from internal combustion trucks to electric trucks powered by carbon free solar power would reduce both local emissions of criteria air pollutants and diesel particulate matter, and GHG emissions. Thus, based on the consistency with applicable GHG reduction plans and quantified emissions detailed in Appendix C, the project's GHG impacts would be **less than significant**.

5.5.9 Hazards and Hazardous Materials

5.5.9.1 Hazards Within One-Quarter Mile of a School

There are no schools within 0.25 miles of the project site. The closest school to the project site is Kimball Elementary School, located approximately 0.45 miles east of the project site. **No impact** would occur.

5.5.9.2 Airport Land Use Plan

The closest airports to the project site are the San Diego International Airport, located approximately 5.5 miles northwest of the project site, and the Naval Air Station North Island (NASNI), located approximately 4.7 miles northwest of the project site. The project site is partially located in the Airport Influence Area of the NASNI Airport Land Use Compatibility Plan (ALUCP) but is not within noise or safety zones. As such, the proposed project would not result in a safety hazard for people residing or working in the project area, and **no impact** would occur.

5.5.9.3 Emergency Response or Evacuation Plan

San Diego County Emergency Operations Plan (EOP) is used within San Diego County to aid with the response to major emergencies and disasters. Included in the EOP is the Evacuation Annex, outlining strategies, procedures, recommendations, and organizational structures to implement a coordinated evacuation effort in the San Diego County Operational Area. The EOP identifies evacuation routes along major interstates and highways in San Diego County (County of San Diego 2022). The project site is not located along any major interstates or highways. There would not be any change to emergency access to the project location and the project would not result in the temporary or permanent closures of public roadways or driveways. The project would not impair an adopted emergency response plan or emergency evacuation plan and **no impact** would occur.

5.5.9.4 Wildland Fires

According to California Department of Forestry and Fire Protection's (CAL FIRE) Very High Fire Hazard Severity Zone (VHFHSZ) Maps, the project site is within a non-VHFSZ under local responsibility (CAL FIRE 2025). The project site is in an entirely urban area surrounded by urban and industrial uses and near San Diego Bay. As such, the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Therefore, this impact would be **less than significant**.

5.5.10 Hydrology and Water Quality

5.5.10.1 Groundwater Supplies and Recharge

Construction or operation of the project would not involve groundwater extraction or reduction to groundwater recharge that would produce any effect on the local groundwater supply or groundwater table. Impacts would be **less than significant**.

5.5.10.2 Alteration of Drainage Patterns

As the project site is currently asphalt, the proposed project would generally maintain existing drainage patterns. As part of the project, a portion of the project site would be landscaped with a portion used as a stormwater retention basin and approximately 0.15 acres of the site would be green space. Site drainage would be directed on site via overland flow, surface swales, curbs and gutters, and the private storm drain system. The on-site storm drains would collect runoff and convey it to proposed proprietary biofiltration units for treatment prior to discharging into the on-site green space(s), prior to reaching San Diego Bay. Therefore, the project would not substantially alter the existing drainage pattern of the site. The project would be required to comply with any and all related mandates from a federal, state, and local level, such as preparing a SWPPP, Water Quality Management Plans and Stormwater Management Plans. Furthermore, as the project is within the District's jurisdiction, it is also subject to BMPs and mitigation utilized by the District. Potential increases in peak flows for storm events would be managed through the use of retention BMPs for stormwater runoff generated on the project site. As such, this impact would be **less than significant**.

5.5.10.3 Release of Pollutants Due to Inundation

The project site is in Flood Zone X, an area of minimal flood hazard (FEMA 2019). According to the Tsunami Hazard Area Map, the project site is not within a tsunami hazard area (DOC 2025d). Additionally, there is no risk of seiches in National City due to its position within San Diego Bay behind Coronado Island and the Silver Stand (City of National City 2024). As shown in the National City Bayfronts Projects & Plan Amendments EIR, Figure 4.9-3, Project Components & Sea Level Rise (100-year event), the project site may experience partial inundation under the 2100 High Sea level Rise (SLR) Scenario, approximately 75 years from now (San Diego Unified Port District 2022). This timeframe extends beyond the lease term and design life of the proposed development, and prior to that point, redevelopment or development improvements (including potential repowering) would occur. At that time, an updated assessment of SLR conditions and projections would inform whether adaptation measures would be necessary. As such, impacts related to the release of pollutants due to inundation would be **less than significant**.

5.5.11 Land Use and Planning

5.5.11.1 Physical Division of an Established Community

The project site is currently developed with parking and is surrounded by industrial uses. There are no residential uses on the project site, nor are residential uses allowed on District Tidelands. Therefore, development of the project site would not physically divide an established residential neighborhood or community, and **no impact** would occur.

5.5.11.2 Conflicts with Plans and Policies

The proposed project would not change the use, or use designation, of the site and activities would be supportive and consistent with the industrial maritime activities surrounding the site. Land east of the project site within the City of National City is zoned for industrial and commercial uses, consistent with the proposed project. As such, the project would be consistent with the PMP. Further, the project facilitates implementation of the District's MCAS, the California Sustainable Freight Action Plan, and APCD's Portside Community Emission Reduction Plan, each of which promote clean air initiatives and sustainability. The project would not conflict with applicable policy documents and regulations (e.g., Coastal Zone Management Act, California Coastal Act, Public Trust Doctrine, City of National City Transportation Element, and SANDAG Regional Plan). Therefore, this impact would be **less than significant**.

5.5.12 Mineral Resources

5.5.12.1 Mineral Resources of Value to the Region and the State

The project site is located in Mineral Resource Zone-1 (MRZ-1), which is defined as an area where available geologic information indicates that little likelihood exists for the presence of significant mineral resources (DOC 2017). The project site is a paved lot and surrounded by urban and developed land. As such, the project would not result in the loss of availability of a known mineral resource. **No impact** would occur.

5.5.12.2 Locally Important Mineral Resource Recovery Sites

The project site and surrounding land are urban, developed land. There are no known mineral resources at the project site and no locally important mineral resource recovery sites would be lost as a result of the project. **No impact** would occur.

5.5.13 Noise

5.5.13.1 Exposure to Excessive Airport Noise Levels

As described in Section 5.5.9.2, Airport Land Use Plan, the project site is partially located within the Airport Influence Area of the NASNI ALUCP but is not within noise or safety zones. In addition, the project site is not located near a private air strip. As such, operation of the project would not expose employees to excessive aircraft noise. **No impact** would occur.

5.5.14 Population and Housing

5.5.14.1 Population Growth Inducement

The growth-inducing potential of a project would typically be considered significant if it fosters growth or a concentration of population in excess of what is assumed in applicable land use plans. Significant growth impacts could also occur if a project provides infrastructure or service capacity to accommodate levels of growth beyond levels currently permitted by local or regional plans or policies.

The project does not propose new homes or businesses that would directly induce population growth. Temporary construction-related jobs generated by the project would likely be met within the existing and future labor market

in the City of National City and in the greater San Diego County area. If construction workers live outside of the City, these workers would likely commute during the temporary construction period. Operationally, the convenience store would require a minor number of new employees, which is not expected to result in substantial population growth. Employment needs can be met by the existing regional labor force, and no substantial relocation of workers would occur. Additionally, the proposed convenience store would support the existing population of truck drivers anticipated to use the electric charging stations. As such, the project would not directly induce population growth.

In addition, the project does not include the extension of roads or other infrastructure that would indirectly induce substantial population growth. Access to the project site would continue to be off Tidelands Avenue and no new entrances would be created on the site. The project would also require new electric facilities to be installed on the project site in joint utility trenches that would be located in public rights-of-ways. In conjunction with electricity, internet facilities would be installed in the joint utility trenches. Although the project includes new utility connections and minor roadway improvements to serve the site, these improvements would not extend circulation into undeveloped areas or open new areas to development. Therefore, the project would not indirectly induce substantial population growth

Thus, the project would not induce substantial unplanned population growth and impacts would be **less than significant**.

5.5.14.2 Displacement of People or Housing

The land use designation for the project site is marine related industrial. Residential housing is not an allowable use for this designation; no housing currently exists on the project site, and residential uses are not allowed on District Tidelands. Therefore, the project would not displace people or housing and would not require the construction of replacement housing. **No impact** would occur.

5.5.15 Public Services

5.5.15.1 Fire Protection

Fire protection services are provided to the project site by the San Diego Harbor Police and City of National City Fire Department. The closest fire station to the project site is the National City Fire Department Fire Station No. 34, located approximately 1 mile east of the project site. As discussed in Section 3.3, Hazards and Hazardous Materials, the project could result in inadvertent releases of hazardous materials in the event of the ignition and burning of the BESS or a thermal runaway. The project proponent proposes to install several fire detection and mitigation systems, supplemented with external, specialized fire detection cameras, and other response measures. Therefore, the project would not require the provision of new or physically altered public fire protection facilities. Impacts would be **less than significant**.

5.5.15.2 Police Protection

Law enforcement services are provided to the project site by the Port of San Diego Harbor Police Department and National City Police Department. As discussed in Section 5.5.14, Population and Housing, the project would not induce substantial unplanned population growth in the area. Therefore, the project would not increase the demand for existing public facilities. Operationally, the convenience store would require a minor number of new employees,

which is anticipated to be met by the existing regional labor force. Therefore, the project would not require the provision of new or physically altered public police protection facilities. Impacts would be **less than significant**.

5.5.15.3 Schools, Parks, and Other Public Facilities

As discussed in Section 5.5.14, the project would not induce substantial unplanned population growth in the area. The project would not result in permanent population growth that would increase demand on schools, parks, or other public facilities. Furthermore, project operations would require a minor number of new employees, which is anticipated to be met by the existing regional labor force. Therefore, the project would not require the provision of new or physically altered public school or other public facilities. Therefore, **no impact** would occur.

5.5.16 Recreation

5.5.16.1 Increased Use of Parks or Other Recreational Facilities

An increase in the use of existing parks and recreational facilities typically results from an increase in the number of housing units or residences in the surrounding area. As discussed in Section 5.5.14, the project would not involve the construction of housing units or residences. The demand for temporary construction jobs and operational employment would be met by the local work force, and the project would not induce unplanned population increase. As such, the project would not contribute to a permanent increase in population that would increase the use of existing parks or recreational facilities. **No impact** would occur.

5.5.16.2 Construction or Expansion of Recreational Facilities

The project would include ZEV truck charging, a photovoltaic canopy, a BESS, convenience store, and infrastructure improvements. The project would not involve the construction or expansion of recreational facilities. **No impact** would occur.

5.5.17 Transportation

5.5.17.1 Vehicle Miles Traveled

Under CEQA Guidelines Section 15064.3(b), the project's impact on a roadway network would be significant if the project would result in a net increase in vehicle miles traveled (VMT) over baseline conditions, or otherwise conflict with CEQA Guidelines Section 15064.3(b). The proposed project would facilitate existing heavy-duty trucks used for drayage within the industrial maritime activities of the area switching from diesel to ZEV while otherwise conducting drayage activities occurring today. Therefore, while heavy-duty trucks are not included in VMT analyses, it is anticipated that ZEV trucks using the project site are replacing diesel powered trucks previously in use within the area (goods movement corridor). Although existing diesel drayage trucks currently do not visit the site these vehicles routinely pass the site and new visits to the site would consist only of those ZEV trucks coming to charge. Nominal VMT may be assigned to the employees and visitors to the convenience store as well as inspections and maintenance of the proposed project; however, as employees would number less than 10 and inspections would be periodic, the proposed project would not result in a substantial increase in VMT over baseline. Impacts would be **less than significant**.

5.5.18 Tribal Cultural Resources

5.5.18.1 California or Local Register of Historical Resources

AB 52, signed by the California Governor in September of 2014, established a class of resources under CEQA: "tribal cultural resources," defined in PRC Section 21074. Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation before the release of an EIR, negative declaration, or mitigated negative declaration. Following distribution of the Notice of Preparation (NOP), the Native American Heritage Commission (NAHC) responded with information to support tribal consultation under AB 52 to identify and protect tribal cultural resources. Notices for AB 52 consultation were sent out to 12 tribes via email and certified mail on July 3, 2025, with a deadline for response on August 8, 2025. On August 18, 2025, the District sent a follow up email to the tribes and sent certified mail to tribes for whom an email address was not provided on August 19, 2025, offering additional time to request consultation with an extended deadline of September 5, 2025. The specific details of the consultations are confidential pursuant to California law; however, a summary of events related to communication between the tribes and the District is provided below (Table 5-3). One California Native American tribe responded to the District's consultation request and met with District Staff, and another did not request a meeting but did request tribal monitoring during ground-disturbing activities as did the tribal representative that met with District Staff. Known tribal cultural resources were not identified by tribal members, but concern was expressed regarding the potential to unearth resources during excavation activities. The site is entirely previously disturbed including subsurface utilities, former railroad, and existing asphalt. Ground excavation activities would be limited to the repair of existing asphalt, laying of electrical conduit, BESS and convenience store foundations, and existing subsurface utilities modifications. Nevertheless, the project includes Project Condition (PC) TCR-1, which requires tribal monitoring during excavations that penetrate the existing pavement (see Section 2.8, Project Conditions, for full text of this PC).

Table 5-3. Summary of AB 52 Consultation Outreach and Responses

Native American Tribe Contacted	Date of Initial Response from Native American Tribe	District Follow-up Response	Comment
Viejas Band of Kumeyaay Indians	July 7, 2025	July 10, 2025	The tribe responded via email on July 7, 2025. Consultation was not requested. The District responded on July 10, 2025. The tribe responded on July 10, 2025, and requested tribal cultural monitoring during ground-disturbing activities. The District responded on July 11, 2025.
Manzanita Band of the Kumeyaay Nation	August 26, 2025	August 26, 2025	The tribe responded via email on August 26, 2025, requesting consultation. The meeting was held on October 9, 2025. The proposed project was discussed and the representative requested tribal cultural monitoring for any ground-disturbing activities that penetrate existing pavement. The representative requested to keep consultation open throughout the next steps of the process.
Jamul Indian Village of California	NA	NA	NA

Table 5-3. Summary of AB 52 Consultation Outreach and Responses

Native American Tribe Contacted	Date of Initial Response from Native American Tribe	District Follow-up Response	Comment
Campo Band of Diegueno Mission Indians	NA	NA	NA
Barona Group of the Capitan Grande	NA	NA	NA
Ewiiaapaayp Band of Kumeyaay Indians	NA	NA	NA
Iipay Nation of Santa Ysabel	NA	NA	NA
Inaja-Cosmit Band of Indians	NA	NA	NA
La Posta Band of Diegueno Mission Indians	NA	NA	NA
Mesa Grande Band of Diegueno Mission Indians	NA	NA	NA
San Pasqual Band of Diegueno Mission Indians	NA	NA	NA
Sycuan Band of the Kumeyaay Nation	NA	NA	NA

Given the disturbed nature of the site, limited excavation, and incorporation of tribal monitoring, impacts to Tribal Cultural Resources would be **less than significant**.

5.5.18.2 Resources of Significance to California Native American Tribes

Pursuant to PRC Section 21080.3.1 (AB 52), California Native American tribes traditionally and culturally affiliated with the project area can request notification of projects in their traditional cultural territory. Two California Native American tribes responded to the District's consultation request and both requested tribal monitoring during ground-disturbing activities. However, only the Manzanita Band of the Kuymeyaay Nation requested consultation, as discussed above. Although the site is previously developed and paved, and excavation will be limited, the District has incorporated PC-TCR-1, which requires tribal monitoring during excavation that penetrates the existing pavement. This measure ensures that in the unlikely event any potential tribal cultural resources encountered during construction will be appropriately identified and protected.

With this project condition in place and no known significant tribal cultural resources identified during consultation, the impact would be **less than significant**.

5.5.19 Utilities and Service Systems

5.5.19.1 Significant Environmental Effects from Construction or Relocation of Utility Infrastructure

The project would require connections to the existing water supply system, wastewater infrastructure, stormwater infrastructure, and local electric power distribution systems. As the project site is developed and in an industrial area, all utilities are available to service the site or adjacent properties, and only minor modifications would be necessary to connect the project to these. With the exception of electrical power, the service demand from the project on services would be small and primarily driven by the convenience store and restrooms (water and sewer). Electricity is available from nearby San Diego Gas & Electric (SDG&E) facilities. While upgrades to the nearby SDG&E facilities may be necessary to support full buildout of the project, demand would be offset by the project's photovoltaic and BESS components. Any improvements required by SDG&E would occur within existing SDG&E facilities and/or rights-of-way within the existing industrial area and would not result in significant environmental effects. Implementation of the project includes a stormwater retention basin that would not require new or expanded off-site facilities, and the project would not require natural gas. Therefore, impacts would be **less than significant**.

5.5.19.2 Sufficient Water Supplies

The project would receive water from the Sweetwater Authority. The project's convenience store and restrooms would increase water usage compared to existing conditions. However, based on the small size of the store and small number of restroom stalls and showers, this increase would be negligible and impacts would be **less than significant**.

5.5.19.3 Adequate Wastewater Treatment Capacity

The project would receive wastewater service from National City. The project's convenience store, showers and restrooms would increase wastewater need compared to existing conditions. However, based on the small number of restroom stalls and showers, this increase would be negligible and impacts would be **less than significant**.

5.5.19.4 Solid Waste Infrastructure Capacity

As the site does not contain any structures, solid waste from construction would be minimal and limited to asphalt debris that cannot be reused on site. The project's convenience store and restrooms would generate solid waste once operational. However, based on the small size of the convenience store and restrooms, this increase would be negligible, and impacts would be **less than significant**.

5.5.19.5 Compliance with Regulations Related to Solid Waste

As the site does not contain any structures, solid waste from construction would be minimal and limited to asphalt debris that cannot be reused on site. The project's convenience store and restrooms would generate solid waste once operational. All solid waste would be disposed of in compliance with federal, state, and local regulations including recycling requirements and hazardous waste requirements. As such, impacts would be **less than significant**.

5.5.20 Wildfire

5.5.20.1 Emergency Response and Evacuation Plans

The project site is within a local responsibility area and is designated by CAL FIRE as a non-VHFHSZ (CAL FIRE 2025), with the nearest VHFHSZ located approximately 6.7 miles east of the project site. The areas around San Diego Bay are primarily developed and are not susceptible to wildfires. San Diego County EOP is used within San Diego County to aid with the response to major emergencies and disasters. Included in the EOP is the Evacuation Annex, outlining strategies, procedures, recommendations, and organizational structures to implement a coordinated evacuation effort in the San Diego County Operational Area. The EOP identifies evacuation routes along major interstates and highways in San Diego County (County of San Diego 2022). The project site is not located along any major interstates or highways. There would not be any change to emergency access to the project location and the project would not result in the temporary or permanent closures of public roadways or driveways. The project would not impair an adopted emergency response plan or emergency evacuation plan, and **no impact** would occur.

5.5.20.2 Pollutant Concentrations

The project site consists of paved surfaces and is not near any urban-wildland interface. The risk of wildfire is low due to the project site being within a non-VHFHSZ. Therefore, the project would not exacerbate the risk of wildfires. **No impact** would occur.

5.5.20.3 Infrastructure and Wildfire Risk

The project site consists of paved surfaces and is not near any urban-wildland interface. The risk of wildfire is low due to the project site being within a non-VHFHSZ. Furthermore, the site is surrounded by existing infrastructure including roads and electrical services. Therefore, the project would not exacerbate the risk of wildfires. **No impact** would occur.

5.5.20.4 Post-Wildfire Hazards

Downstream flooding and landslide activity generally occurs in areas that lack vegetation and have steep slopes. The project site consists of paved surfaces and is not near any urban-wildland interface. The risk of wildfire is low due to the project site being within a non-VHFHSZ. Therefore, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. **No impact** would occur.

6 Alternatives to the Proposed Project

6.1 Overview

This chapter describes and analyzes a range of reasonable alternatives that could feasibly attain most of the project objectives while avoiding or substantially lessening one or more of the significant effects of the proposed Tidelands Avenue Electric Truck Hub Project (project). The primary purpose of this chapter is to ensure that the comparative analysis provides sufficient detail to foster informed decision-making and public participation in the environmental process.

Three alternatives to the proposed project are analyzed in this chapter and discussed in terms of their merits relative to the project:

- **Alternative 1** – No Project Alternative
- **Alternative 2** – No Interim Generator Alternative
- **Alternative 3** – Alternate Location Alternative

6.2 Requirements for Alternative Analysis

California Environmental Quality Act (CEQA) Guidelines Section 15126.6(a) requires that an environmental impact report (EIR) present a range of reasonable alternatives to a project, or to the location of a project, that could feasibly attain a majority of the basic project objectives, but that would avoid or substantially lessen one or more significant environmental impacts of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider every conceivable alternative to a project. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the basic project objectives, are not feasible, or do not avoid or substantially lessen any significant environmental effects (CEQA Guidelines Section 15126.6[c]).

In addition to the requirements described above, CEQA requires the evaluation of a No Project Alternative, which analyzes the environmental effects that would occur if the project did not proceed (CEQA Guidelines Section 15126.6[e]). Moreover, the EIR is required to identify the environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, the EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

6.3 Selection of Alternatives

In developing alternatives that meet the requirements of CEQA, the starting point is the proposed project's objectives. The objectives of the proposed project are as follows:

1. Contribute to achieving the District's goal of electrifying the District's maritime operations, specifically the movement of goods via heavy-duty trucks.
2. Facilitate compliance with the District's long-term emissions goals for maritime operations.

3. Reduce criteria pollution emissions and improve air quality and health benefits in the Portside Community and greater San Diego Air Basin.
4. Design a truck charging hub utilizing industry best practices for safety, including first-move-forward and pull-through parking areas.
5. Provide health equity through the decarbonization and lowering of pollution in historically poor air quality zones and communities.
6. Support the Maritime Clean Air Strategy (MCAS) long-term goal to achieve 100% zero-emissions vehicle (ZEV) heavy-duty truck trips by 2030 to the marine cargo terminals and advance MCAS Truck Goal 2, which focuses on facilitating the deployment of infrastructure to support the transition to ZEV trucks.
7. Provide a size and scale that achieves a development cost efficiency and an affordable, sustainable energy source for operators.
8. Generate and store zero-carbon electricity on site to supplement utility power and lower the carbon intensity of energy provided on site.
9. Prioritize access to charging infrastructure for ZEV truck operators visiting one of the District's marine cargo terminals and maximize charging utilization.
10. Provide small-fleet and independent ZEV truck operators with a safe, fast, and reliable charging facility in close proximity to marine cargo terminals.
11. Support the District's consistency with the California Sustainable Freight Action Plan.
12. Utilize awarded grant funding and meet contractual obligations to construct 70 ZEV truck charging stalls in an expeditious manner.

CEQA also requires alternatives to be feasible. Feasible is defined in CEQA as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (California Public Resources Code Section 21061.1). The CEQA Guidelines indicate that factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, other plans or regulatory limitations, and jurisdictional boundaries and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (CEQA Guidelines Section 15126.6).

Finally, the alternatives should also avoid or substantially lessen one or more significant environmental impacts that would occur under the proposed project. Table 6-1 summarizes the proposed project's significant impacts. The analysis of alternatives is in Section 6.5.

Table 6-1. Summary of Significant Environmental Impacts of the Proposed Project

Resource Impact	Significant and Unavoidable	Less than Significant with Mitigation
Section 3.1, Air Quality		
No significant impact identified	N/A	N/A
Section 3.2, Energy		
No significant impact identified	N/A	N/A
Section 3.3, Hazards and Hazardous Materials		
No significant impact identified	N/A	N/A

Table 6-1. Summary of Significant Environmental Impacts of the Proposed Project

Resource Impact	Significant and Unavoidable	Less than Significant with Mitigation
Section 3.4, Hydrology and Water Quality		
No significant impact identified	N/A	N/A
Section 3.5, Noise		
No significant impact identified	N/A	N/A
Section 3.6, Transportation		
No significant impact identified	N/A	N/A

6.4 Alternatives Considered

Six alternatives were initially considered for evaluation, of which three were carried forward for further consideration in the EIR. As described below in Section 6.4.1, three alternatives were considered but rejected, including the BESS Technology Alternative, the No BESS Alternative, and the Diesel Truck Stop Alternative. Based on the criteria described in Section 6.3, the No Project Alternative, the No Interim Generator Alternative, and the Alternate Location Alternative were considered and analyzed in Section 6.4.2, Alternatives Selected for Analysis. As further discussed in Section 6.4.2, these alternatives involve modifications to the proposed project intended to lessen the severity of impacts identified for the proposed project, as no significant impacts were identified for the proposed project.

6.4.1 Alternatives Considered but Rejected

In accordance with CEQA Guidelines Section 15126.6(c), an EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and should briefly explain the lead agency's determination. Factors that may be used to eliminate alternatives from detailed consideration in an EIR include failure to meet most of the basic project objectives, infeasibility, or inability to avoid significant environmental effects. The following are alternatives that have been rejected by the lead agency and do not require further analysis in this EIR.

6.4.1.1 Alternate BESS Technology

This alternative would involve replacing the proposed lithium-ion technology using lithium iron phosphate (LFP) chemistry for a BESS with an alternative battery technology that presents lower fire risk and resulting potential for toxic air contaminant emissions. In response to public scoping comments expressing concern about lithium battery fire hazards, this alternative considers the use of alternative chemistries such as iron flow or zinc-based batteries. Lithium Iron Phosphate (LFP) batteries are the most commonly used and deployed energy storage technology. Their advantages include high-energy density, greater efficiency, and are a more mature technology than other battery energy storage technologies. The alternative technology considered by this Alternative includes battery flow technologies which store energy in liquid electrolyte solutions that flow through an electrochemical cell. The most common types are vanadium redox flow batteries and zinc-bromine flow batteries. The flow battery technologies purportedly are scalable, have a longer life span, and improved safety considerations compared to LFP batteries. However, flow battery technologies require more physical space, and are higher in initial construction costs due to the need to develop custom designs and construction techniques coupled with increased on-going maintenance needs. Flow battery technologies can store less energy (less density) as compared to LFP technologies and provide

less efficiency in dispensing the energy (UFine Battery 2024). This alternative would require a larger project area, estimated to be approximately one to one and one-half acres larger, or require a reduction in truck charging stalls to accommodate the increased space needs of the alternative BESS. Flow battery technologies are also considered better suited for large-scale industrial use; the proposed projects' BESS is not considered large-scale.

Available information for flow battery comparisons to LFP batteries is generally limited to manufacturer information or trade organization brochures rather than real-world performance data. Because only a few projects utilizing flow battery technologies have been constructed, there is minimal operational performance data, creating greater uncertainty in the long-term viability of operation of the BESS.

Because the proposed project does not result in significant and unavoidable impacts, the Alternate Technology Alternative would not reduce or avoid a significant impact. The alternative would rely on unproven technology that may not meet operational demands, raising questions about its operational feasibility. It would be custom designed and constructed on an unknown timeline, delaying emissions reduction from operating ZEV Trucks, and require an expanded project area or reduction in charging stalls, inconsistent with project objectives. Additionally, this alternative would not meet project objective 7 or 12 and would lessen the project's ability to meet sustainability and operational objectives 1, 2, 3, and 6. For these reasons, the Alternate BESS Technology Alternative was rejected from further consideration.

6.4.1.2 No BESS Alternative

This alternative would remove the BESS from the project, relying solely on grid power and solar generation. Under this alternative, the project would still include ZEV truck charging infrastructure, photovoltaic (PV) canopies, a convenience store, and associated site improvements.

Without the BESS, the facility would be more dependent on grid power during peak demand periods, with solar offering some supplemental power only during the day, which could increase operational costs and reduce energy resilience. While this alternative would still support ZEV truck charging, it would offer fewer sustainability benefits and would not align as strongly with the District's Maritime Clean Air Strategy or the California Sustainable Freight Action Plan.

Because the proposed project does not result in significant and unavoidable impacts, the No BESS Alternative would not reduce or avoid a significant impact. Additionally, this alternative would not meet project objective 8 and would lessen the project's ability to meet sustainability and operational objectives 1, 2, 3, 6, and 7. For these reasons, the No BESS Alternative was rejected from further consideration.

6.4.1.3 Diesel Truck Stop Alternative

This alternative would involve the development of a conventional diesel truck stop, including fueling stations, truck parking, and driver amenities, but would not include ZEV charging infrastructure. The Diesel Truck Stop Alternative is fundamentally inconsistent with the purpose and objectives of the proposed project, which are centered on supporting ZEV infrastructure and reducing air pollution in alignment with the District's MCAS and the California Sustainable Freight Action Plan.

This alternative would continue to support diesel-fueled freight operations and would not include infrastructure for ZEV charging. As such, it would not contribute to the implementation of the District's MCAS or the California Sustainable Freight Action Plan, both of which prioritize the transition to ZEV technologies. Additionally, this

alternative would not address the identified need for ZEV truck charging infrastructure in proximity to marine terminals and associated facilities.

Because the proposed project does not result in significant and unavoidable environmental impacts, the Diesel Truck Stop Alternative would not reduce or avoid a significant impact. Furthermore, it would not meet any of the project's primary objectives related to supporting ZEV infrastructure and reducing emissions. For these reasons, this alternative was not carried forward for detailed analysis.

6.4.2 Alternatives Selected for Analysis

The proposed project would not result in any significant impacts. Therefore, no alternatives were identified that meet the requirements of CEQA because there would be no significant impacts that an alternative to the proposed project could avoid or substantially lessen. However, for informational purposes, a comparative analysis of reasonable alternatives is provided below.

This section discusses a reasonable range of alternatives to the proposed project, including a No Project Alternative in compliance with CEQA Guidelines Section 15126.6(e). These alternatives are as follows:

- **Alternative 1** – No Project
- **Alternative 2** – No Interim Generator
- **Alternative 3** – Alternate Location Alternative

Pursuant to CEQA Guidelines Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of a project. Each alternative is also evaluated to determine whether the project objectives would be substantially attained.

6.4.2.1 Alternative 1 – No Project

The No Project Alternative is required by CEQA to discuss and analyze potential impacts that would occur if the proposed project were not implemented. Under the No Project Alternative, the project site would continue to be used as an overflow roll-on/roll-off yard and chassis storage facility (parking) for Pasha Automotive. None of the proposed project components would be constructed and implemented.

Under the No Project Alternative, the proposed development of ZEV truck charging infrastructure, including PV canopies, BESS, and driver amenities, would not be implemented. As a result, no new charging facilities would be constructed at or near marine terminals and associated facilities, and no operational accommodations such as ZEV truck leasing or priority charging would be provided.

6.4.2.2 Alternative 2 – No Interim Generator

Under this alternative, the project would forgo the use of an interim diesel generator during the initial operational phase and instead rely solely on the PV arrays, BESS, and utility grid connection from the outset. While this approach may result in limited charging capacity during early operations, particularly before full grid interconnection and PV/BESS optimization, it would eliminate short-term emissions associated with an interim diesel generator use. Although emissions from the interim generator under the proposed project are not considered significant, this alternative would better align with the project's sustainability objectives and the District's MCAS by avoiding on-site

combustion-based energy sources entirely. Based on the analysis below, Alternative 2, the No Interim Generator Alternative, would be the environmentally superior alternative.

6.4.2.3 Alternative 3 – Alternate Location Alternative

Under this alternative, the proposed project would be located on the southwest corner of the 19th St./Tidelands Ave. intersection, instead of the northwest corner of this intersection where the project is currently proposed. The current location was identified from the following multi-year, transparent process that started with the District issuing a Request for Information (RFI) on May 23, 2022 (Appendix H), seeking input on issues including, but not limited to, development interest, business models, siting preferences, and cost and timelines for the development of public-facing infrastructure for ZEV trucks. The RFI included four sites located on Tidelands Avenue and four regional locations throughout San Diego County along routes frequented by trucks traveling to and from the District's marine cargo terminals. This RFI also welcomed suggestions for developing sites not identified in the solicitation.

The on-Tidelands parcels initially considered for the project included (see Figure 6-1, RFI Identified Potential Project Locations on Tidelands):

1. Tenth Avenue Marine Terminal (TAMT) Dirt Lot (San Diego)
2. Pepper Oil (National City)
3. 19th Street and Tidelands Avenue, Northwest (National City)
4. 19th Street and Tidelands Avenue, Southwest (National City)

The four sites on Tidelands, shown in Figure 6-1, were identified through an initial survey of potential project locations performed by District Staff, meeting the following key criteria:

1. Consistency with land use designation in the Port Master Plan, to ensure that electric truck charging hub use would be compatible with the parcels' land use designation.
2. Proximity to the District's marine terminals, to achieve the MCAS Objectives to facilitate the transition to zero emission trucks serving the District's marine terminals.
3. Proximity to the existing trucking route, to minimize out-of-the-way travel for truck drivers and avoid impacts to local roads, businesses and residents.
4. Site availability, the parcels were either vacant or under a short-term real estate agreement to allow timely use of the parcel for the project.
5. Adequate size, the parcel was deemed large enough to accommodate ZEV truck infrastructure.

In addition to the four Tidelands parcels, four regional sites were also identified based on their strategic locations along existing trucking corridors.

The regional locations considered include sites east of Tidelands, in Otay Mesa, along the Interstate (I) 8 corridor, and near the I-15/I-76 intersection. While these regional sites received some interest through the RFI process, they are located outside the District's jurisdictional boundary and authority as a lead agency under CEQA. However, these regional sites continue to be considered in coordination with the California Department of Transportation (Caltrans) pursuant to a 2023 Memorandum of Agreement. The District and Caltrans agreed to work cooperatively toward the mutual goal and shared vision of developing sustainable transportation and freight projects to support

the San Diego region and District operations, that benefit underserved communities and promote climate action, including ZEV and truck infrastructure.

The RFI solicitation closed on July 25, 2022. The District received 18 responses from a wide range of entities with proposals for both hydrogen fuel cell and battery electric vehicle infrastructure technologies under a variety of different business models. After reviewing the 18 responses received, staff determined that collectively there were several promising site concepts and business models, but not one response alone met all of the criteria above, as determined by the District. However, the results of the RFI did provide valuable insight into current market trends, technological feasibility, and suitable locations, allowing the District to narrow down preferred site concepts.

The RFI results also showed that the two sites at the 19th Street and Tidelands Avenue intersection in National City generated the highest level of interest of all the on-Tidelands sites. Table 6-2 shows respondents' interest in the proposed sites.

Table 6-2. Request for Information Responses to Potential Project Sites on Tidelands

Proposed On-Tidelands Sites	Approximate Acreage	Number of Interested Respondents
19th/Tidelands Northwest	8.2	12
19th/Tidelands Southwest	5	11
TAMT Dirt Lot	1	7
Pepper Oil	2.75	7

The other two Tidelands sites (TAMT Dirt Lot and Pepper Oil) received less interest and fewer responses. These sites were also deemed unsuitable following continued internal deliberation by District staff. The TAMT Dirt Lot site presented additional constraints, including its smaller size at 1 acre, presence of an easement, and existing use as a truck staging and queuing area for maritime operations. Furthermore, the irregular (non-rectangular) shape of the lot would not accommodate the preferred "rainbow configuration" for ingress of trucks, charging, and egress. The Pepper Oil site was removed from consideration due to ongoing litigation affecting the property.

Issuance of a Request for Proposals (RFP) was identified by staff as a potential next step in the process to develop the infrastructure needed to support ZEV trucks on Tidelands. The purpose of the RFP would be to identify and select an entity to develop, operate, and maintain the proposed ZEV truck infrastructure site at the intersection of 19th Street and Tidelands Avenue. In September 2022, staff presented the RFI findings and proposed RFP to regional stakeholders at the following meetings:

- Maritime Stakeholders Forum (9/15/2022)
- National City, City Council (9/20/2022)
- Barrio Logan Community Planning Group (9/21/2022)
- (Assembly Bill 617) Portside Community Steering Committee (9/27/2022)

On November 8, 2022, at a meeting open to the public, the Board of Port Commissioners (Board) authorized staff to issue an RFP to develop ZE infrastructure on Tidelands located at the intersection of 19th Street and Tidelands Avenue in National City, and any other potentially viable locations on Tidelands which staff or RFP respondents may identify (Resolution No. 2022-136). The site on the southwest corner of the 19th Street and Tidelands Ave. intersection was split into two separate parcels, labeled 2 and 3 in Figure 6-2, Potential Project Sites from RFP, due

to an existing easement to Austal USA that is actively used as an access point and cuts across the parcel from west to east.

An RFP was issued on April 24, 2023, and closed on August 9, 2023 (see Appendix H). Respondents were asked to submit a proposal that included the following:

- Project design in a phased approach, specifying how many Electric Vehicle Supply Equipment (EVSE) units and their energy level (minimum of 10-350kW dual port EVSEs in Phase 1), trigger for subsequent development phases, on-site amenities, and location – *either parcel 1, 2, 3, or a combination*
- Business model (e.g., Charging as a Service, Trucking as a Service (TaaS), revenue share)
- Distributed Energy Resources (e.g., Solar panels, microgrid battery)
- Community Benefit

The RFP received six responses. Of these, District staff interviewed four respondents. The two highest-ranked proposals received through this process proposed development at the 19th/Tidelands Northwest Parcel (Site 1) and at the southern portion of the 19th/Tidelands Southwest Parcel (Site 3). During fall 2023, staff continued to keep community stakeholders informed on the progress of the proposed project, providing an overview of the RFP process and a summary of the two RFP finalists' proposals. Staff presented to the following regional stakeholders:

- Maritime Stakeholders Forum (9/21/2023)
- National City, City Council (10/17/2023)
- Barrio Logan Community Planning Group (10/18/2023)
- Environmental Health Coalition (10/25/2023 and 11/7/2023)
- (Assembly Bill 617) Portside Community Steering Committee (11/28/2023)

On November 14, 2023, staff presented and asked the Board for direction on development proposals received from two companies in response to the RFP. The Board directed each finalist to revise their proposals based on their feedback. Staff considered the revised proposals and continued to meet with stakeholders to discuss the project at the following meetings:

- National City, City Council (1/10/2024, 2/5/2024, and 3/6/2024)
- Environmental Health Coalition (2/6/2024 and 3/7/2024)

Following stakeholder discussions and the competitive evaluation of the revised proposals, District staff recommended that the Board select Skychargers LLC to develop and operate a ZEV truck stop at the northwest corner of the 19th Street and Tidelands Avenue intersection in National City. On March 12, 2024, the Board authorized Resolution Selecting and Authorizing Negotiations with Skychargers LLC to Develop and Operate Zero Emission Truck Stop, National City (Resolution No. 2024-0055). The Board further directed staff to conduct a project feasibility study during the term of the exclusive negotiation agreement and take into consideration potential impacts to National City from the proposed project and negotiate terms of an Exclusive Negotiating Agreement.

On August 8, 2024, staff updated the Board via Board Memorandum on several items, including status of the exclusive negotiation agreement, and the requested project feasibility study, fire risk (thermal runaway) concerns, refinement of the project description and preparation for the Board's Preliminary Project Review and next steps.

Skychargers LLC's commenced site due diligence and began stakeholder coordination. On August 14, 2024, the District entered into an exclusive negotiation agreement with Skychargers LLC.

On September 10, 2024, at a public Board hearing, the Board received a preliminary project review presentation and project update. The presentation provided a proposed project timeline, an overview of the battery energy storage system technology and the proposed Fire Hazards Mitigation Plan and Fire Protection/Response Plan, as well as an update on the latest stakeholder coordination, which included the following meetings:

- City of National City (3/13/2024, 5/29/2024, and 9/5/2024)
- San Diego Gas & Electric (6/28/2024, 8/6/2024, and 8/14/2024)
- Environmental Health Coalition (7/2/2024, 8/7/2024, and 9/3/2024)
- Maritime Stakeholders Forum (5/2/2024)
- U.S. Department of the Navy (7/25/2024)
- Site Visit to Port of Los Angeles/Prologis ZEV Truck Site (7/15/2024)

The presentation also gave an overview of the project features and components, including TaaS and the conclusions of the feasibility and market analysis study. At the same hearing, the Board authorized staff to commence environmental review in accordance with CEQA for the development of a ZEV truck hub on the northern portion of the parcel on the northwest corner of the 19th Street and Tidelands Avenue intersection.

This process revealed limited opportunities for industrial projects on District Tidelands given the limited area designated for industrial land uses and limited parcels that are available and not under long-term real estate agreements. The proposed project location and the location analyzed in this Alternate Location Alternative analysis were the two locations that advanced the furthest in the solicitation process and met most or all the site suitability criteria.

6.5 Environmental Effects of the Project Alternatives

6.5.1 Analysis of Alternative 1 – No Project

The following presents the impact analysis by resource area for Alternative 1, the No Project Alternative.

6.5.1.1 Air Quality

The No Project Alternative would not result in any construction activities that would result in additional air pollutant emissions. Under the No Project Alternative, operational conditions would be the same as existing conditions at the site, which results in air pollutants associated with the on-site roll-on/roll-off yard and parking. Air pollutant emissions from diesel-powered drayage trucks and other combustion-engine vehicles currently operating in and around the site would persist and remain the dominant fuel source for drayage trucks. This alternative would not contribute to the reduction of mobile-source emissions that would otherwise be achieved through the proposed project's support for ZEV infrastructure. Consequently, the No Project Alternative would not support regional or state air quality improvement goals and would not reduce exposure to air pollutants for nearby communities. Although temporary construction related emissions under the No Project Alternative would be avoided, when compared to the proposed project, emissions and air quality health risks from operations would be greater under the No Project Alternative than the proposed project, which were determined to be less than significant. Impacts would be slightly

greater under the No Project Alternative compared to the proposed project, although impacts would also be less than significant.

6.5.1.2 Energy

The No Project Alternative would not result in increased demand for electricity, gasoline, or diesel in the project area, as no construction would occur and operational conditions would remain consistent with existing conditions. However, the No Project Alternative would not include any renewable energy generation components, nor would it facilitate the use of ZEVs. As a result, the No Project Alternative would not contribute to the District's MCAS or support the District's goal of electrifying drayage operations. Continued reliance on diesel-powered trucks would perpetuate existing energy consumption patterns and associated emissions. Compared to the proposed project, which was found to have less-than-significant impacts related to energy, the No Project Alternative would result in slightly greater impacts, although impacts would also be less than significant.

6.5.1.3 Hazards and Hazardous Materials

Under the No Project Alternative, no construction or operational activities would occur at the project site. As a result, there would be no ground-disturbing activities and no potential to encounter any unknown existing soil contamination or hazardous materials that may be present. Additionally, because the BESS would not be installed, this alternative would avoid potential hazards associated with the handling, storage, and eventual disposal of battery modules and related components as well as the potential risk of upset from thermal runaway of the BESS. The proposed project includes implementation of an Emergency Response Plan and Hazard Mitigation Analysis, as well as compliance with all regulatory requirements applicable during construction and operation. Impacts from the proposed project would be less than significant. The No Project Alternative would avoid any impacts associated with project operations or construction of the BESS entirely, and no impacts would result. Therefore, the No Project Alternative would result in slightly reduced hazards and hazardous materials impacts compared to the proposed project and a reduction in the level of significance from less than significant (proposed project) to no impact (No Project Alternative).

6.5.1.4 Hydrology and Water Quality

Under the No Project Alternative, the site would continue to operate as a paved roll-on/roll-off and chassis storage yard. No construction or operational activities associated with the proposed project would occur, and the site would remain in its current condition. As such, there would be no ground disturbance, grading, or installation of new stormwater infrastructure. The existing site conditions involve vehicle movement and storage on impervious surfaces, which can generate untreated stormwater runoff containing pollutants such as oil, grease, and other vehicle-related contaminants. Under the No Project Alternative, these conditions would persist, and no improvements would be made to treat or manage runoff. While the proposed project includes stormwater drainage features such as a stormwater retention basin and green space, the proposed project would generally maintain the existing drainage pattern. As such, the No Project Alternative would avoid short-term construction-related impacts and impacts would be reduced compared to the proposed project and a reduction in the level of significance from less than significant (proposed project) to no impact (No Project Alternative).

6.5.1.5 Noise

Under the No Project Alternative, the proposed ZEV truck charging facility, PV canopies, BESS, convenience store, and associated infrastructure would not be constructed. As such, no construction-related noise impacts would occur, and temporary noise from grading, paving, equipment use, and installation activities would be avoided. Operational noise associated with electric truck charging, vehicle circulation, and use of the convenience store would also not occur under this alternative.

Because the site would remain in its existing condition, with no new sources of noise introduced, overall noise levels would remain consistent with current conditions. While the proposed project would result in less than significant construction and operational noise impacts with implementation of applicable regulations, the No Project Alternative would avoid these impacts entirely. Therefore, the No Project Alternative would result in reduced overall noise and vibration impacts when compared with the proposed project and a reduction in the level of significance from less than significant (proposed project) to no impact (No Project Alternative).

6.5.1.6 Transportation

The No Project Alternative would not include any construction activities that would result in direct or indirect impacts associated with temporary construction vehicle trip generation. Under the No Project Alternative, the site would continue to operate as a paved roll-on/roll-off and chassis storage yard. The proposed project is estimated to generate approximately 672 daily trips, including 148 AM and 148 PM peak hour trips, during operation, which would slightly increase queueing but not such that conflicts with a program plan or policy addressing the circulation system would result nor that hazards would be increased substantially. Under the No Project Alternative, these trips would not occur, and there would be no increase in queueing associated with the proposed project. However, the No Project Alternative would not support long-term improvements to the regional transportation system related to EV infrastructure. Compared to the proposed project, the No Project Alternative would result in reduced transportation impacts, due to the absence of construction-related vehicle trips and operational traffic and a reduction in the level of significance from less than significant (proposed project) to no impact (No Project Alternative).

6.5.1.7 Relationship to Project Objectives

The No Project Alternative would not meet any of the project objectives. It would not support the District's goals to electrify drayage operations, reduce emissions, or expand zero-emissions truck infrastructure. As a result, this alternative would not advance the project objectives or the strategic goals outlined in the MCAS.

6.5.2 Analysis of Alternative 2 – No Interim Generator

The following presents the impact analysis by resource area for Alternative 2, No Interim Generator. Because no significant impacts were identified for the proposed project, this analysis considers whether the alternative would lessen the magnitude of the impact identified for the proposed project.

6.5.2.1 Air Quality

Under the No Interim Generator Alternative, the project would not include the temporary use of a diesel generator during the initial operational phase. Instead, the facility would rely solely on the PV arrays, BESS, and utility grid

connection from the outset. As a result, this alternative would avoid short-term emissions associated with generator operation.

Although emissions from the interim generator under the proposed project were determined to be less than significant, eliminating the generator would further reduce localized air pollutant emissions during early operations. This would enhance consistency with the project's sustainability objectives and regional air quality goals, including those outlined in the District's MCAS. Therefore, the No Interim Generator Alternative would result in slightly reduced air quality impacts compared to the proposed project although impacts would also be less than significant.

6.5.2.2 Energy

Under the No Interim Generator Alternative, the project would not include the temporary use of a diesel generator during the initial operational phase. As a result, this alternative would avoid short-term consumption of fossil fuels associated with generator operation, including diesel fuel use and associated greenhouse gas emissions. While this may result in limited charging capacity during early operations, the facility would still rely on renewable energy generated by the PV arrays, stored in the BESS, and supplemented by grid electricity. By eliminating reliance on temporary fossil fuel-based power generation, it would enhance alignment with long-term sustainability objectives.

Compared to the proposed project, which was found to have less-than-significant impacts related to energy, the No Interim Generator Alternative would result in slightly reduced energy impacts due to its avoidance of fossil fuel use although impacts would also be less than significant.

6.5.2.3 Hazards and Hazardous Materials

Similar to the proposed project, the No Interim Generator Alternative would involve the use of hazardous materials associated with the BESS and EV charging infrastructure. However, by eliminating the temporary diesel generator, this alternative would avoid short-term risks related to the handling, storage, and potential release of diesel fuel and combustion byproducts. Therefore, impacts would be slightly reduced compared to the proposed project although impacts would also be less than significant.

6.5.2.4 Hydrology and Water Quality

The No Interim Generator Alternative would not result in any changes to the project's drainage design, impervious surface area, or stormwater management features. The removal of the interim diesel generator would not require additional grading, foundation work, or drainage infrastructure. As such, this alternative would have the same hydrology and water quality impacts as the proposed project. All applicable best management practices and stormwater controls would be implemented. Therefore, impacts would be similar to the proposed project and would also be less than significant.

6.5.2.5 Noise

Under the No Interim Generator Alternative, short-term noise associated with generator operation would be avoided. While the generator was not expected to generate noise levels exceeding applicable thresholds or affect nearby receptors, its removal would result in a slight reduction in overall noise levels during the initial operational phase. Therefore, noise impacts under this alternative would be slightly reduced compared to the proposed project although impacts would also be less than significant.

6.5.2.6 Transportation

Under the No Interim Generator Alternative, the project's site design, access, and long-term truck volumes would remain the same. However, due to potentially limited charging capacity during early operations, there could be a slight reduction in the number of electric drayage trucks able to utilize the facility during the initial operational phase. This minor reduction in truck activity would not result in any significant change to traffic conditions or transportation impacts. Therefore, transportation impacts under this alternative would be similar to the proposed project and would be less than significant.

6.5.2.7 Relationship to Project Objectives

The No Interim Generator Alternative would meet all of the project's objectives. By relying solely on grid electricity, PV generation, and the BESS from the outset, this alternative would eliminate short-term emissions associated with the interim diesel generator. As a result, it would better align with the project's sustainability and air quality goals. This alternative would result in a slight improvement in achieving objectives related to reducing emissions and generating zero-carbon electricity (objectives 1, 3, 5, 7, 8, and 11) by avoiding the use of a combustion-based energy source during early operations. However, this alternative would have a potentially delayed effectiveness in meeting Objective 9, maximizing charging utilization, as this alternative would result in potentially limited charging capacity during early operations until San Diego Gas & Electric improvements are completed. This alternative may also potentially result in not meeting objective 12 as sufficient energy supplies for 70 stalls may not be available from the grid connection upon project opening.

6.5.3 Analysis of Alternative 3 – Alternate Location Alternative

The following presents the impact analysis by resource area for Alternative 3, Alternate Location. While the Alternate Location Alternative is considered in response to public scoping comments to consider alternative locations that could reduce traffic and purported land use impacts, the proposed project analysis did not identify any significant impacts. Land Use, as a resource area, was eliminated from further analysis during the scoping process as the project area is designated for industrial and maritime uses; the adjacent land use designations of the City of National City also provide for industrial and commercial uses. As described above, the District conducted a multi-year solicitation process that was open to the public for comment and participation, to collect input that informed the District Board's decision to proceed with evaluating the proposed project at the current location.

This alternative analysis considers whether an Alternate Location, the northern portion of the 19th/Tidelands Southwest Parcel (Site 2) and the southern portion of the 19th/Tidelands Southwest Parcel (Site 3) (see Figure 6-2 for a map of sites), would lessen the potential impacts, especially transportation impacts, that could result from construction and operation of the proposed project. Sites 2 and 3 were chosen for this alternate location analysis because, they were identified during the public solicitation process as meeting most of the site selection criteria including size, land use and proximity to existing designated truck route. Sites 2 and 3 occupy 2.77 and 2 acres, respectively, and are separated by an existing access easement. For the purposes of this Alternate Location Alternative analysis, they are considered together as a 4.77-acre site which could accommodate the features of the proposed project, namely 70 charging stalls, PV canopies, a convenience store, restrooms, and a BESS.

6.5.3.1 Air Quality

The Alternate Location Alternative would be constructed and operated in the same manner as the proposed project including all normal condition emissions sources. The site would generally be constructed in the same manner, including pavement repair and preparation and construction of PV canopies, landscaping, best management practices, the convenience store, and restrooms as well as the BESS facility. The Alternate Location Alternative would require the same project area size and direct access to the designated truck routes to facilitate access to the regional freeway network. Therefore, the Alternate Location Alternative would result in similar emissions from construction compared to the proposed project and the same truck/vehicle trip generation and VMT, resulting in similar operational emissions; the severity of air quality impacts under the Alternate Location Alternative would remain less than significant and the severity would not be reduced compared to the proposed project.

6.5.3.2 Energy

As discussed in Section 3.2, Energy, the proposed project would include an on-site solar PV system to offset its energy demand. The Alternate Location Alternative would be constructed and operated in a similar manner to the proposed project. The site would generally be constructed in the same manner, including pavement repair and preparation and construction of PV canopies, landscaping, best management practices, the convenience store, and restrooms as well as the BESS facility. Therefore, construction-related energy demand would be similar to the proposed project. Operational energy use would also be similar as the Alternate Location Alternative would include the same truck and passenger vehicle trip generation. Therefore, energy impacts (i.e., consumption) under the Alternate Location Alternative would remain less than significant and the severity would not be reduced compared to the proposed project.

6.5.3.3 Hazards and Hazardous Materials

The Alternate Location Alternative would be constructed and operated in the same manner as the proposed project. The site would generally be constructed in the same manner, including pavement repair and preparation and construction of PV canopies, landscaping, best management practices, the convenience store, and restrooms as well as the BESS facility. The alternate location would require the same project area size and direct access to the designated truck routes to facilitate access to the regional freeway network. Compared to the proposed project, the Alternate Location Alternative would result in similar risks involving the release of hazardous and hazardous materials during construction and operation of the charging facility. Therefore, the Alternate Location Alternative would result in a similar risk of release of hazardous materials; hazards and hazardous materials risk under this alternative would be similar to those of the proposed project and impacts would remain less than significant for hazards and hazardous materials.

6.5.3.4 Hydrology and Water Quality

The Alternate Location Alternative would be constructed and operated in the same manner as the proposed project, including the same truck and passenger vehicle trip generation. The site would generally be constructed in the same manner, including pavement repair and preparation and construction of PV canopies, landscaping, best management practices, the convenience store, and restrooms as well as the BESS facility. The alternate location would require the same project area size and direct access to the designated truck routes to facilitate access to the regional freeway network. An alternate location would still be required to meet applicable water quality/stormwater quality runoff standards and protective BMPs during construction. Therefore, overall hydrology

and water quality impacts under this alternative would be similar to those of the proposed project and would be less than significant.

6.5.3.5 Noise

The Alternate Location Alternative would be constructed and operated in the same manner as the proposed project. Construction noise levels would be similar, as Sites 2 and 3 would require similar site grading, foundation installation, and electrical connections. The major, operational, continuous-type noise generating components of the project, which include the electric vehicle chargers, heating, ventilation, and air conditioning units associated with the convenience store, and the BESS units, would remain under this alternative. However, the Alternate Location Alternative could be located closer to sensitive receptors than the proposed project location. Proximity of sensitive receptors to the noise source is a key consideration of noise impacts, which are less than significant for the proposed project at Site 1 in part due to its proposed location and proximity to sensitive receptors. Noise impacts under this alternative would be similar to the proposed project and would be less than significant.

It should be noted that while not a CEQA threshold, potential noise impacts to the Military Working Dog facility on Navy Base San Diego was analyzed and considered in site design features. The proposed project at its current location does not pose a risk of disturbing the Working Dogs during rest hours. The noise generating features fo the proposed project, when sited at Site 2, may be closer to the Military Working Dog facility which could change this determination and present impacts to the operational and field duties of the Military Working Dogs and their handlers.

6.5.3.6 Transportation

The Alternate Location Alternative would be constructed and operated in a similar manner to the proposed project, including the same truck/vehicle trip generation and VMT. Additionally, the Alternate Location Alternative would still require direct access to the designated truck routes to facilitate access to the regional freeway network and this alternative may change traffic patterns or generate new transportation impacts. For example, Site 2 is located nearest to Navy Gate 13, one of the Naval Base San Diego security gates that provide access to the base, located at the west end of 19th Street, and ingress and egress into Site 2 could cause delayed gate access during the AM peak hours, increasing traffic delay, vehicle emissions and compromise gate security. Therefore, transportation impacts under this alternative would be similar or increased compared to the proposed project, but would likely remain less than significant.

6.5.3.7 Relationship to Project Objectives

The Alternate Location Alternative would consist of the same project components as the proposed project and would meet most of the project's objectives. However, as previously discussed, the District went through a multi-year, transparent, public deliberation process regarding potential project locations during which the proposed project location was identified as the most suitable location to operate ZEV truck charging infrastructure. The District's Maritime Clean Air Strategy goals include transitioning heavy-duty trucks serving the marine cargo terminals to zero-emission technologies, with the long-term goal of 100% ZEV truck trips. Achieving these goals requires significant time, education, and substantial financial investment. Delays in constructing and operating the proposed project would significantly postpone achieving these goals and risk the loss of over $25 million in public grants from a variety of state and federal agencies, which is critical to supporting the transition to zero-emission technologies.

Redesigning the project to the Alternate Location Alternative would delay meeting most project objectives and would likely preclude achieving Objective 6, which seeks to achieve the rapid transition of ICE powered trucks to zero-emission technologies. Any significant project delays would also prevent the achievement of Objective 12, which aims to utilize awarded grant funding and meet contractual obligations to promptly construct 70 ZEV truck charging stalls. The Alternative Location Alternative would also delay realization of objectives 1, 2, 3, 5, 10, and 11 which would be inconsistent with the Maritime Clean Air Strategy and delay actions aimed at reducing air pollution within one of the most heavily air polluted areas in the State of California, which has led to its inclusion into the AB617 Community Air Protection Program of the California Air Resources Board.

6.5.4 Environmentally Superior Alternative

Pursuant to CEQA, the EIR is required to identify the environmentally superior alternative. The No Interim Generator Alternative (Alternative 2) achieves the greatest reduction of impact severity and is considered the environmentally superior alternative (see Table 6-3). Alternative 2 would eliminate the temporary use of a diesel generator during the initial operational phase, which would reduce impacts related to air quality, energy, hazards and hazardous materials, and noise. Alternative 2 would meet all of the project objectives (see Table 6-4) and would result in a slight improvement in achieving objectives related to reducing emissions and generating zero-carbon electricity (objectives 1, 3, 5, 8, and 11) by avoiding the use of a combustion-based energy source during early operations.

Table 6-3. Summary Impact Comparison of Proposed Project and Alternatives

Environmental Resource	Proposed Project Determination	No Project (Alternative 1)	No Interim Generator (Alternative 2)	Alternate Location (Alternative 3)
Air Quality	Less than significant	▲	▼	–
Energy	Less than significant	▲	▼	–
Hazards and Hazardous Materials	Less than significant	▼	▼	–
Hydrology and Water Quality	Less than significant	▼	–	–
Noise	Less than significant	▼	▼	–
Transportation	Less than significant	▼	–	▲

Notes: BESS = battery energy storage system.
▲ Alternative is likely to result in greater impacts to issue when compared to proposed project.
– Alternative is likely to result in similar impacts to issue when compared to proposed project.
▼ Alternative is likely to result in reduced impacts to issue when compared to proposed project.

Table 6-4. Summary of Project Objective Comparison of Proposed Project Alternatives

Project Objectives	No Project (Alternative 1)	No Interim Generator (Alternative 2)	Alternate Location (Alternative 3)
1. Contribute to achieving the District's goal of electrifying the District's maritime operations, specifically the movement of goods via heavy-duty trucks.	No	Yes	Yes, but delayed

Table 6-4. Summary of Project Objective Comparison of Proposed Project Alternatives

Project Objectives	No Project (Alternative 1)	No Interim Generator (Alternative 2)	Alternate Location (Alternative 3)
2. Facilitate compliance with the District's long-term emissions goals for maritime operations.	No	Yes	Yes, but delayed
3. Reduce criteria pollution emissions and improve air quality and health benefits in the Portside Community and greater San Diego Air Basin.	No	Yes	Yes, but delayed
4. Design a truck charging hub utilizing industry best practices for safety, including first-move-forward and pull-through parking areas.	No	Yes	Yes
5. Provide health equity through the decarbonization and lowering pollution in historically poor air quality zones and communities.	No	Yes	Yes, but delayed
6. Support the MCAS long-term goal to achieve 100% ZEV heavy-duty truck trips by 2030 to the marine cargo terminals and advance MCAS Truck Goal 2, which focuses on facilitating the deployment of infrastructure to support the transition to ZEV trucks.	No	Yes	No
7. Provide a size and scale that achieves a development cost efficiency and an affordable, sustainable energy source for operators.	No	Yes	Yes
8. Generate and store zero-carbon electricity on site to supplement utility power and lower the carbon intensity of energy provided on site.	No	Yes	Yes
9. Prioritize access of charging infrastructure for ZEV truck operators visiting one of the District's marine cargo terminals and maximize charging utilization.	No	Yes	Yes
10. Provide small-fleet and independent ZEV truck operators with a safe, fast, and reliable charging facility in close proximity to marine cargo terminals.	No	Yes	Yes, but delayed
11. Support the District's consistency with the California Sustainable Freight Action Plan.	No	Yes	Yes, but delayed

Table 6-4. Summary of Project Objective Comparison of Proposed Project Alternatives

Project Objectives	No Project (Alternative 1)	No Interim Generator (Alternative 2)	Alternate Location (Alternative 3)
12. Utilize awarded grant funding and meet contractual obligations to construct 70 ZEV truck charging stalls in an expeditious manner	No	No*	No

Notes: District = San Diego Unified Port District; MCAS = Maritime Clean Air Strategy; ZEV = zero-emissions vehicles.
* = this may be a "yes" if grid power capacity is increased prior to the project opening, currently not available.

SOURCE: Maxar 2025; Open Street Map 2025

DUDEK

0 1,000 2,000 Feet

FIGURE 6-1

RFI Identified Potential Project Locations on Tidelands

Tidelands Avenue Electric Truck Hub

INTENTIONALLY LEFT BLANK

SOURCE: Maxar 2025; Open Street Map 2025

DUDEK

0 300 600 Feet

FIGURE 6-2

Potential Project Sites from RFP

Tidelands Avenue Electric Truck Hub

INTENTIONALLY LEFT BLANK

7 List of Preparers and Agencies Consulted

7.1 Lead Agency—San Diego Unified Port District

Phil Gibbons, Deputy Director of Climate and Sustainability, Climate & Sustainability
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7.4 Environmental Soil Screening Evaluation–GEOCON Incorporated

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7.5 Hazard Mitigation Analysis/Emergency Response Plan–Energy Safety Response Group

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7.6 Stormwater Pollution Prevention Plan/Storm Water Quality Management Plan Memorandum – Burns & McDonnell

Jayme Dye, Civil Department Manager

7.7 Agencies, Organizations, and Persons Consulted

State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit
Andrew Green, Cultural Resources Analyst, Native American Heritage Commission
Jasmin Ayres, Community Planning and Liaison Officer, Naval Base San Diego
Sophie Silvestri, Director of Commercial & External Affairs, Pasha Automotive Services
Robert Hernandez, Division Chief/Fire Marshall
Eddie Sanchez, Acting Deputy Fire Marshall
Deputy Fire Marshal Bob Drew, National City Fire Department

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Appendices

Appendices to the Draft EIR are provided on the USB/Thumb Drive enclosed and available on the Port's website at https://www.portofsandiego.org/public-records/port-updates/notices-disclosures/ceqa-documents or through contacting Peter Eichar, Principal Planner, at the Port via email at peichar@portofsandiego.org.