Final Mitigated Negative Declaration Addendum No.1

HII San Diego Shipyard Inc. Marginal Wharf Repair and As-Needed Pile Replacement Project

UPD #MND-2019-013/SCH #2019011069

SEPTEMBER 2022

Prepared for:

SAN DIEGO UNIFIED PORT DISTRICT
3165 Pacific Highway
San Diego, California 92101
Megan Hamilton, Senior Planner
619.308.0765

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024
Candice Disney Magnus
760.642.8261

Printed on 30% post-consumer recycled material.

Table of Contents

SECTION **PAGE NO.**

FIGURES

TABLES

APPENDIX

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ALUCP	Airport Land Use Compatibility Plan
AIA	Airport Influence Area
ADT	Average Daily Trip
BMP	best management practice
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of Montclair
CMP	Congestion Management Plan
CNRA	California Natural Resources Agency
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	Greenhouse Gas
I-5	Interstate 5
I-10	Interstate 10
IEUA	Inland Empire Utilities Agency
INRMP	Integrated Natural Resource Management Plan
IS	Initial Study
LID	Low Impact Development
Mall	Montclair Plaza
MND	Mitigated Negative Declaration
MRF	material recovery facilities
MRZ	Mineral Resource Zone
MSCP	Multiple Species Conservation Program
MVWD	Monte Vista Water District
NAHC	Native American Heritage Commission
ND	Negative Declaration
NMDSP	North Montclair Downtown Specific Plan
NMSP	North Montclair Specific Plan
NOLF	Naval Outlying Landing Field Imperial Beach
NPDES	National Pollutant Discharge Elimination System
ONT ALUCP	Ontario International Airport Land Use Compatibility Plan
OPR	Governor's Office of Planning and Research
RWQCB	Regional Water Quality Control Board
SANBAG	San Bernardino Associated Governments
SANDAG	San Diego Association of Governments

Acronym/Abbreviation	Definition
SR-75	State Route 75
SWPPP	Stormwater Pollution Protection Plan
USFWS	United States Fish and Wildlife Service
USA	Urban Systems Analysts
WQMP	Water Quality Management Plan

1 Introduction

This Addendum to the Final Mitigated Negative Declaration (MND) for the HII San Diego Shipyard Inc. Marginal Wharf Repair and As-Needed Pile Replacement Project Mitigated Negative Declaration (Unified Port District #MND-2019-013; State Clearinghouse #2019011069) ("2019 Final MND") evaluates proposed changes between the proposed repair, maintenance, and replacement of in-water facilities at the HII San Diego Shipyard (Updated Project) against the repair, maintenance and replacement activities (Original Project) evaluated in the adopted 2019 Final MND in accordance with Section 21166 of California Environmental Quality Act (CEQA) and Section 15162 of the State CEQA Guidelines to determine if further environmental analysis is required. The HII San Diego Shipyard is now known as Continental Maritime of San Diego and will be referred to as HII San Diego Shipyard in this document for continuity with the 2019 Final MND.

The Updated Project would result in additional repair and demolition activities at the project site than what was analyzed in the 2019 Final MND.

As the lead agency under CEQA, the San Diego Unified Port District (Port District) has determined that in accordance with CEQA Section 21166 and Guidelines 15162 and 15164 that an Addendum to the 2019 Final MND is required and accordingly has prepared an Addendum. This Addendum is organized as an environmental checklist and documents that the Updated Project would meet the conditions outlined in State CEQA Guidelines Section 15164, which provide for CEQA compliance through the consideration of an addendum to a previously adopted environmental document.

A description of the 2019 Final MND background is provided in Section 1.2, "Previous Environmental Analyses," and a detailed description of the original and updated projects is provided in Section 2, "Project Description."

1.1 Previous Environmental Analyses

The 2019 Final MND consists of the following documents that are relevant to consideration of the Updated Project:

- Draft MND for the HII San Diego Shipyard Inc. Marginal Wharf Repair and As-Needed Pile Replacement Project Mitigated Negative Declaration (Unified Port District #MND-2019-013; State Clearinghouse #2019011069, Clerk Doc No. 69876), January 2019.
- Final MND for the HII San Diego Shipyard Inc. Marginal Wharf Repair and As-Needed Pile Replacement Project Mitigated Negative Declaration (Unified Port District #MND-2019-013; State Clearinghouse #2019011069), April 2019.

In January 2019, the Port District prepared a Draft MND for the Original Project which included the in-water repair, maintenance and replacement of the existing in-water facilities on a site leased to HII San Diego Shipyard Inc. (now Continental Maritime of San Diego, LLC) (Applicant), at 1995 Bay Front Street, San Diego, California, 92113. The HII San Diego Shipyard repairs military vessels and other vessels on the project site. The Draft MND evaluated two components. The first component was the replacement of three wharves that were severely deteriorated. The second component included the installation of replacement piles that would occur on an as-needed basis at the two main piers within the project site, as well as three smaller piers. One of the existing piers was also slated to be demolished and not re-built. In accordance with CEQA, the Draft MND was distributed for a 30-day public review and comment period beginning on January 30, 2019 and ending on February 28, 2019. During that timeframe, the

document was available for review by various federal, state, regional, and local agencies, as well as by interested organizations and individuals. The written comment letters received during the public review period and District responses to the comments received were included in the Final MND that was compiled and adopted by the Board of Port Commissioners in April 2019.

On April 4, 2019, the Port District passed Resolution 2019-040 to adopt the Final MND and Resolution 2019-042 to issue a Coastal Development Permit for the Original Project. The Final MND addressed the comments contained in the comment letters received on the Draft MND and included minor clarifications to the MND text. The Final MND found that the Original Project would have no impact or would not result in significant adverse impacts in the following areas: Aesthetics, Agricultural and Forestry Resources, Air Quality, Cultural Resources, Geology and Soils, Greenhouse Gas (GHG) Emissions, Mineral and Energy Resources, Population and Housing, Public Services, Recreation, Transportation and Traffic, Tribal Cultural Resources, and Utilities and Service Systems. Impacts that were shown to have a less-than-significant impact with mitigation were to Biological Resources as a result of in-water demolition and construction activities, to Hazard and Hazardous Materials, to Hydrology and Water Quality due to hazardous materials in sediment, to Land Use and Planning as a result of a conflict with the District Integrated Natural Resource Management Plan (INRMP), and to Noise as a result of in-water demolition and construction activities. Measures to avoid or mitigate the effects were identified and incorporated into the Original Project to reduce the impacts to below a level of significance.

1.2 California Environmental Quality Act Requirements for Project Changes After a Mitigated Negative Declaration Has Been Certified

Altered conditions, changes, or additions to a project that occur after adoption of an MND may require additional analysis under CEQA. The legal principles that guide decisions regarding whether additional environmental documentation is required are provided in CEQA and the State CEQA Guidelines Section 15162, which establish three mechanisms to address these changes: 1) a subsequent MND (Subsequent MND), 2) a Supplement to an MND, or 3) an addendum to an MND

Section 21166 of CEQA addresses when a previous environmental review for a project has been prepared and approved and whether subsequent or supplemental environmental review is required. Section 21166 states no subsequent or supplemental environmental review shall be required unless:

(a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report.

(b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report.

(c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.

Section 15162 of the state CEQA Guidelines describes the conditions under which a Subsequent EIR or Negative Declaration shall be prepared. When a Negative Declaration has been adopted for a project, no subsequent EIR

shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or Negative Declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternative which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

If none of the conditions set forth in CEQA Guidelines section 15162(b) allowing a lead agency to prepare a subsequent negative declaration are met, CEQA Guidelines section 15164 authorizes the lead agency to prepare an addendum to the previously approved negative declaration. In relevant part, CEQA Guidelines section 15164 states:

> (b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

Based on the criteria above, the District has determined that an addendum is the appropriate CEQA document for the Updated Project. This Addendum is intended to evaluate and confirm CEQA compliance for the Updated Project, which would be a change relative to what is described and evaluated in the 2019 Final MND. This Addendum is organized as an environmental checklist and is intended to evaluate all environmental topic areas for any changes in circumstances or the project description, as compared to the Original Project, and determine whether such changes were or were not adequately covered in the 2019 Final MND. This checklist is not a traditional CEQA Environmental Checklist per Appendix G of the State CEQA Guidelines. Rather, the purpose of this checklist is to evaluate the checklist categories in terms of any "changed condition" (i.e., changed circumstances, project changes, or new information of substantial importance) that may result in a different environmental impact significance conclusion from the 2019 Final MND. The column titles of the checklist have been modified from the Appendix G presentation to help answer the questions to be addressed pursuant to State CEQA Guidelines Sections 15162 and 15164.

INTENTIONALLY LEFT BLANK

2 Project Description

2.1 Original Project

2.1.1 Original Project Background and Need

HII San Diego Shipyard Inc., as the Applicant[1], repairs and maintains military and other seagoing vessels and its operations involve onshore construction equipment, support buildings, wharves, and piers. The piers and associated marginal wharves are made of wood, steel and concrete and are essential to the shipyard's operations. These facilities are inspected on a regular basis. Under the Original Project, inspections had determined that many of the piers, marginal wharves and/or support piles were in need of repair or replacement as they had been on the project site for over 60 years and were aged and/or deteriorated to the extent that they are at the end of their serviceable life. If these facilities were not replaced, berthed vessels could exert further stress on the piers, causing damage and safety issues for structure itself, as well as the surrounding environment.

2.1.2 Original Project Location

The Original Project site was located on the eastern edge of San Diego Bay in the City of San Diego (see Figure 2-1, Original Project Location) and was located on 27.3 acres at 1995 Bay Front Street, San Diego 92113. The Original Project site was leased by the HII San Diego Shipyard from the District and was located in the Belt Street Industrial Subarea of Planning District 4 (Tenth Avenue Marine Terminal) of the District's certified Port Master Plan (PMP). The land and water use designations for the site in the certified PMP included Marine Related Industrial and Specialized Berthing. The Original Project site was located beneath the San Diego-Coronado Bay bridge footprint and included the waterfront on both sides of the bridge (see Figure 2-2, Original Project Environmental Setting).

2.1.3 Original Project Environmental Setting

The Original Project site was in an industrial area on the waterfront of the northeastern side of San Diego Bay. Specialized Berthing, Marine Related Industrial, and other industrial uses surrounded the project site. Cesar Chavez Park was near the site to the northwest and Coronado Island was located to the west across the Bay.

HII San Diego Shipyard operated a ship repair facility that served military and commercial vessels. The Original Project site included both landside and waterside facilities. The landside portions of the project site included surface parking, office buildings, warehouses, outdoor storage areas, stormwater facilities, and other industrial buildings that were involved with repair and maintenance operations. The focus of the Original Project was the water-side portion of the site that included wharves and piers used to moor vessels undergoing repairs at the shipyard. Vessels serviced at this facility were tied off to support piers in berths prior to, during and after repair.

As shown on Figure 2-2, there were six support piers within the project site numbering 1 through 7 (herein referred to as Pier 1, Pier 2, Pier 4, Pier 5, Pier 6, Pier 7; there is no Pier 3) and four marginal wharves associated with Piers 2, 4, 5, and 7 (herein referred to as Wharf 2, Wharf 4, Wharf 5 and Wharf 7). Pier 3 had not been in existence

[1] The HII San Diego Shipyard is now known as Continental Maritime of San Diego and will be referred to as HII San Diego Shipyard in this document for continuity with the 2019 Final MND.

for several decades. In-water operations primarily utilized two of the piers (Pier 4 and Pier 6) and one of the wharves (Wharf 4). The remaining water-side facilities were either not used or were underutilized for operations.

The Original Project site (HII San Diego Shipyard, Inc. leasehold) was subject to Investigative Order R9-2017-0082 (Order) which was issued on August 4, 2017. The Order, issued by the Water Board, directed HII San Diego Shipyard, the City, and Caltrans to submit technical reports pertaining to an investigation of sediment chemistry in San Diego Bay located within the project site – the leasehold bounded on the southeastern side by the CP Kelco leasehold, the eastern side by the San Diego Bay shoreline, and the northwestern side by the Pacific Maritime Freight Leasehold.

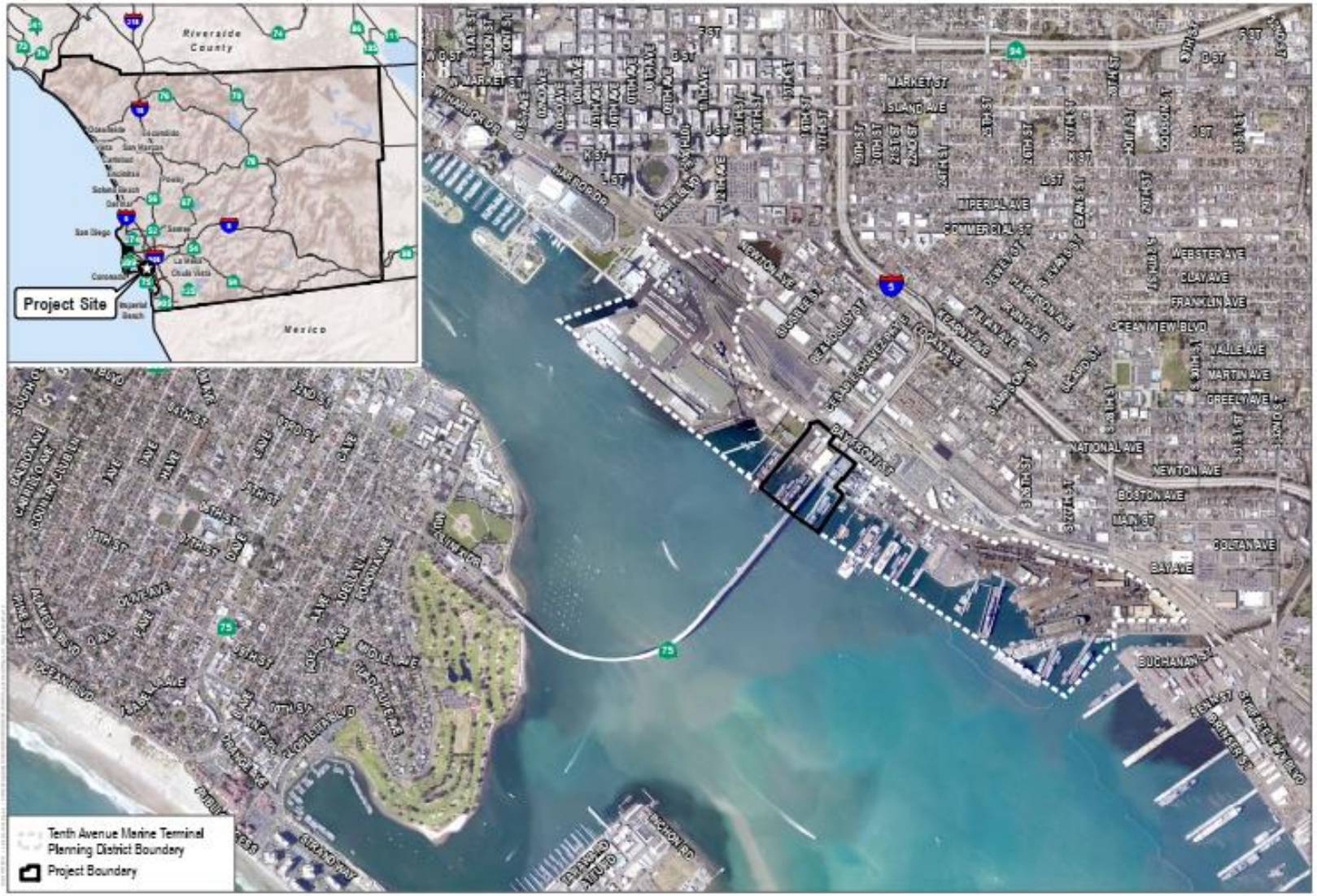


FIGURE 2-1
Original Project Location
HII San Diego Shipyard Marginal Wharf Repair and Pier Replacement Addendum

SOURCE: SANGIS 2017, 2021

DUDEK 0 150 300 Feet

FIGURE 2-2

Original Project Environmental Setting and Surroundings

HII San Diego Shipyard Marginal Wharf Repair and Pier Replacement Addendum

2.1.4 Original Project Components as Analyzed in the 2019 Final MND

The Original Project components analyzed in the 2019 Final MND included two project components (see Figure 2-3, Original Project Proposed Conditions).

Component 1 – Marginal Wharf Repair

Repairs would be conducted at Marginal Wharves 2, 5 and 7, including reconfiguration and pile replacement. The proposed improvements at each of the three wharves are further described below:

(1) **Wharf 2 –** The Original Project proposed to demolish Pier 2 and replace the existing Wharf 2 in its current location to better serve on-going needs, including storage, mooring for security and facility maintenance operations, and for mooring smaller work vessels. The overall footprint of the proposed new Wharf 2 was proposed to be approximately 10,800 SF, which would be larger than the existing 8,360 SF Wharf 2, resulting in the addition in overwater coverage of 2,170 SF. The proposed new Wharf would be reconfigured to maximize operational efficiency. The new configuration of Wharf 2 - would extend 50 feet into the Bay and encompass 216 feet of the near-shore areas currently associated with both Piers 1 and 2 and would be within close proximity to Pier 4.

(2) **Wharf 5 –** The Original Project proposed to replace the existing 109 piles at Wharf 5 with 30 concrete piles. Subsequently, the existing wooden deck would be replaced with 7,142 SF concrete deck, resulting in a reduction in overwater coverage of 4,416 SF. The restored wharf would extend 45 feet into the Bay and would span 160 feet along the quay wall.

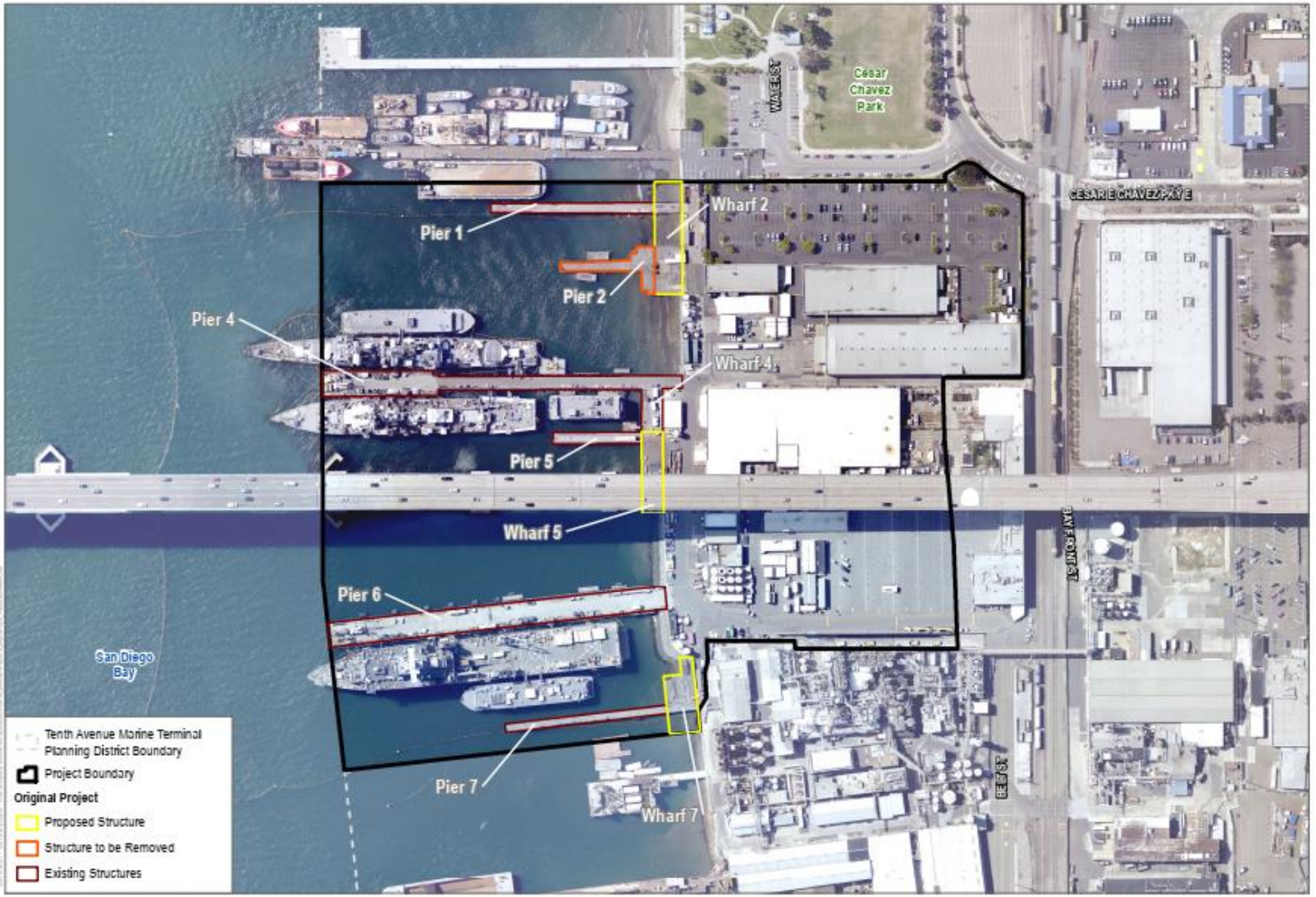
(3) **Wharf 7 –** The Original Project proposed to reconstruct Wharf 7 in the same location prior to its demolition by a storm and remove the remaining damaged portions of Pier 7. While complete design and timing for this component was conceptual, the Original Project assumed that the new Pier 7 and Wharf 7 would consist of 19,405 SF and 8,140 SF, respectively, which would be the same as the former Pier 7 and Wharf 7; thus, there would be no change in overwater coverage. The new Pier 7 and Wharf 7 would be constructed with concrete piles and concrete decking for use as a storage and staging area.

The Original Project resulted in an overall reduction in over water coverage from the wharves of approximately 5,381 SF. Upon completion of the Marginal Wharf Repair component of the Original Project, the wharves were proposed to be utilized for storage and staging for U.S. Navy contracts, as well as mooring small work vessels. The Original Project would also facilitate streamlining operations by providing for more staging and storage areas and would provide for greater safety by repairing or replacing the damaged and deteriorated piles and wharves. However, the Original Project would not result in an increase in operations; nor would it result in any additional employees, other than those needed during construction.

Component 2 – As-needed Pile Replacement

Component 2 of the Original Project included the as-needed pile replacement of all 1,304 piles that existed within the project site. The 1,304 piles would be replaced on an as-needed basis over four phases. The proposed as-needed pile replacement would involve removal of the existing 60-foot-long piles made of wood, concrete, and steel, and replacement with new concrete, plastic or steel fender piles. This would protect the existing piers, remove wood piles with hazardous chemicals from the Bay, and provide the ability to continue to safely moor vessels.

Construction of the Original Project was to be performed in phases. In total, the Original Project would remove up to 850 wooden piles, 302 H-piles (fender), and 152 concrete piles. It would replace them with up to 717 H-piles, 300 H-piles (fender), and 152 concrete piles. Based on the reduction in the number of piles and the types of piles to be used, the Original Project would result in a decrease in the amount of fill at the project site, compared to the existing condition.



SOURCE: SANGIS 2017, 2021

DUDEK 0 150 300 Feet

FIGURE 2-3

Original Project Proposed Conditions

HII San Diego Shipyard Marginal Wharf Repair and Pier Replacement Addendum

2.2 Updated Project

2.2.1 Updated Project Purpose and Need

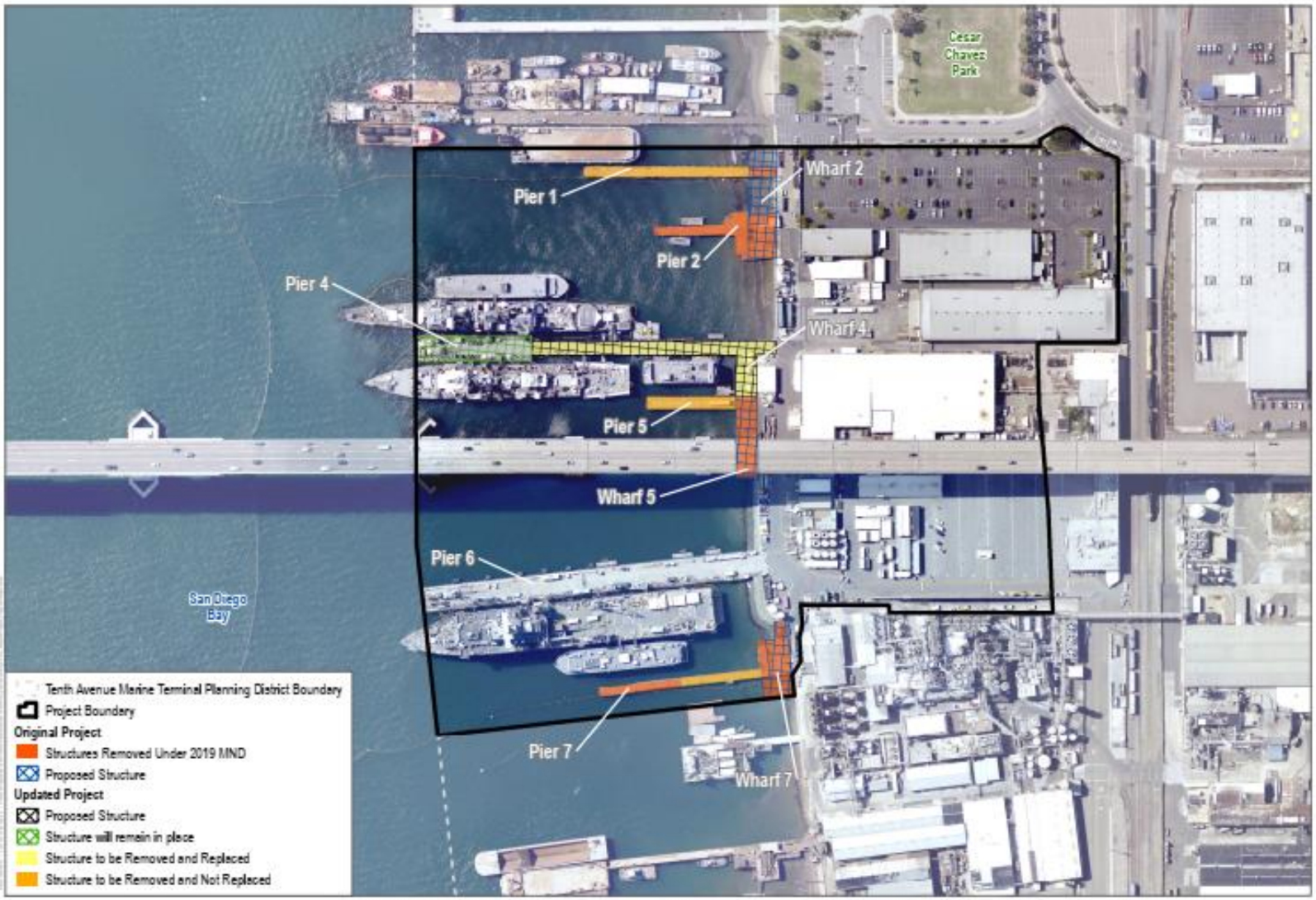
Recent inspections conducted by the HII San Diego Shipyard have identified that the timber deck portions of Pier 4 and its marginal wharf (Wharf 4) have deteriorated to a point where they are in need of repair and maintenance. If the timber deck portions of Pier 4 and Wharf 4 are not repaired, berthed vessels could exert sufficient stress onto these structures, creating damage and safety issues for both the structures and the surrounding environment. Further, portions of the existing concrete rubble quay wall along the facility are deteriorated and considered structurally insufficient to perform daily shipyard activities. Thus, it is necessary to remove and replace a portion of Pier 4 and Wharf 4 and to structurally reinforce the existing quay wall to bring these structures up to new engineering standards that would protect the existing structures. These repairs would allow vessels to safely moor at the pier and improve the safety of daily operations.

In addition, recent inspections have determined that Piers 1, 5 and 7, including their damaged decks and support piles have become deteriorated to the extent that they are at the end of their serviceable life and should be removed.

Thus, the Updated Project proposes to conduct additional demolition, repair, and improvement of existing in-water facilities at the HII San Diego Shipyard's leasehold located at 1995 Bay Front Street, San Diego, California 92113. The Updated Project would be located at the same 27.3-acre site as the Original Project and would include the following additional three components:

(1) Structural Repair of the Existing Quay Wall
(2) Removal and Improvement of Pier 4/Wharf 4 Deck
(3) Removal of deteriorated Piers 1, 5 and 7

These components are shown on Figure 2-4, Proposed Conditions for the Original Project versus Updated Project, and described in more detail below.



SOURCE: SANGIS 2017, 2021

DUDEK 0 150 300 Feet

FIGURE 2-4

Proposed Conditions for the Original Project versus Updated Project

HII San Diego Shipyard Marginal Wharf Repair and Pier Replacement Addendum

2.2.2 Updated Project Components

Component 1 - Structural Repair Existing Quay Wall

The 2019 Final MND did not analyze any changes to the existing quay wall under the Original Project. Portions of the existing concrete rubble quay wall would be reinforced under the Updated Project, including a 425-linear foot stretch along the shoreline from Pier 1 to Pier 4 and a 160-linear-foot stretch along Wharf 7 (see Figure 2-5, Location of Structural Repairs to the Existing Quay Wall). The quay wall would be reinforced by installing steel sheet pile (type ZZ 26-700) along the outer edge of the quay wall. A concrete cap would be installed on top of the sheet pile. The area between the existing and proposed quay wall would be backfilled with cementitious slurry (see Figure 2- 6, Partial Quay Wall Plan and Elevation and Figure 2-7, Quay Wall Cross Section).

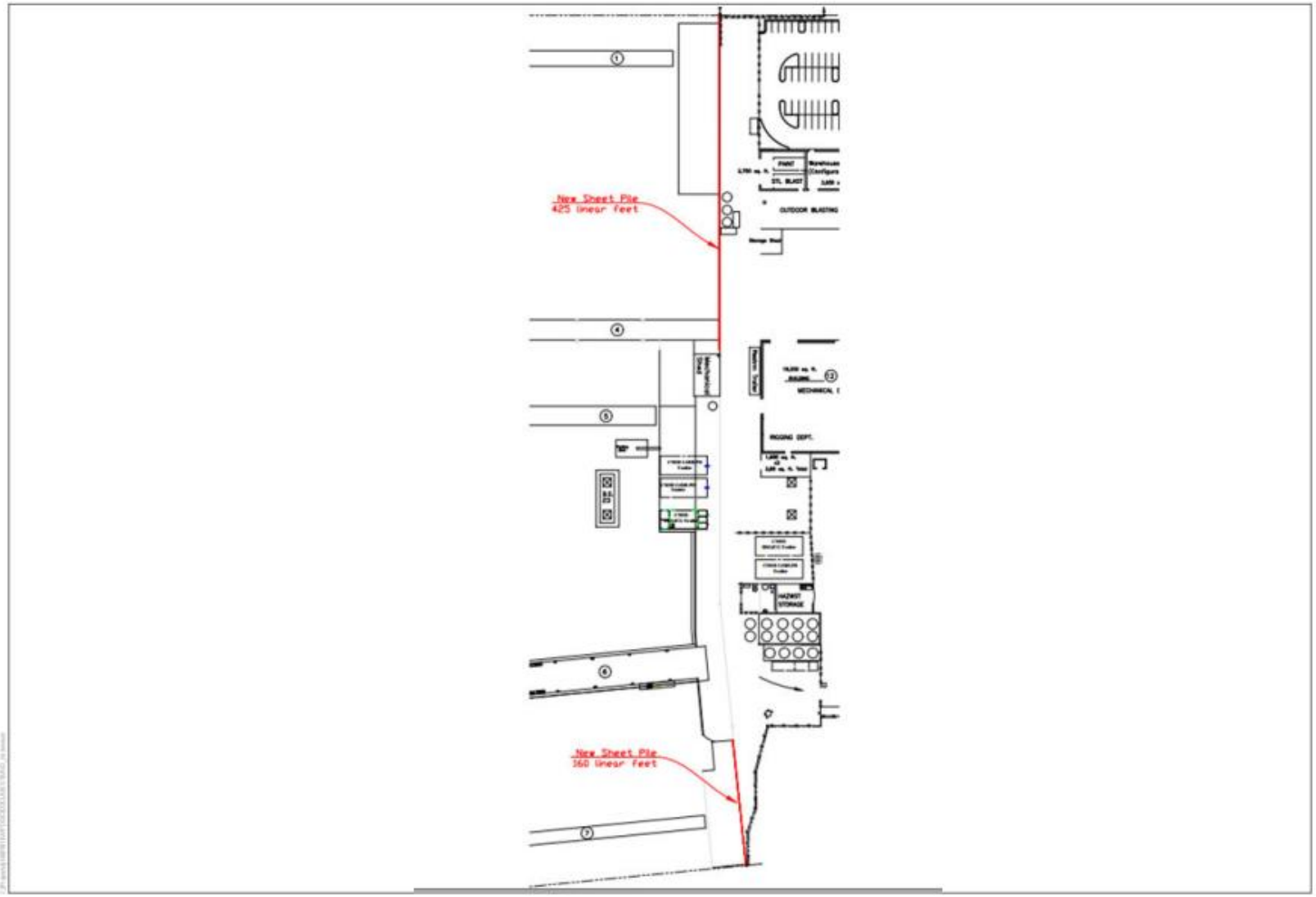


FIGURE 2-5

Location of Structural Repairs to the Existing Quay Wall

HII San Diego Shipyard Marginal Wharf Repair and Pier Replacement Addendum

DUDEK

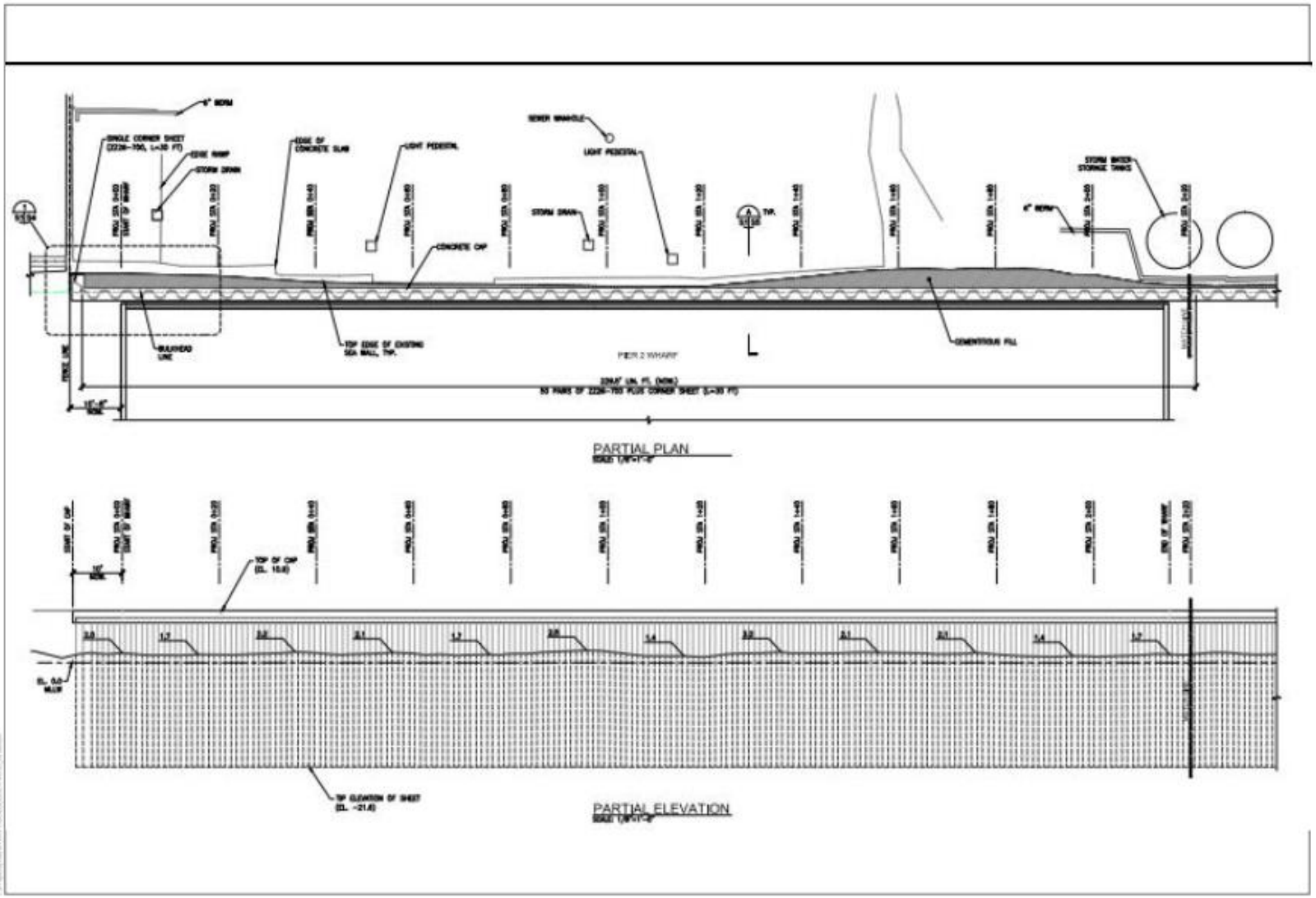


FIGURE 2-6

Partial Quay Wall Plan and Elevation

HII San Diego Shipyard Marginal Wharf Repair and Pier Replacement Addendum

DUDEK

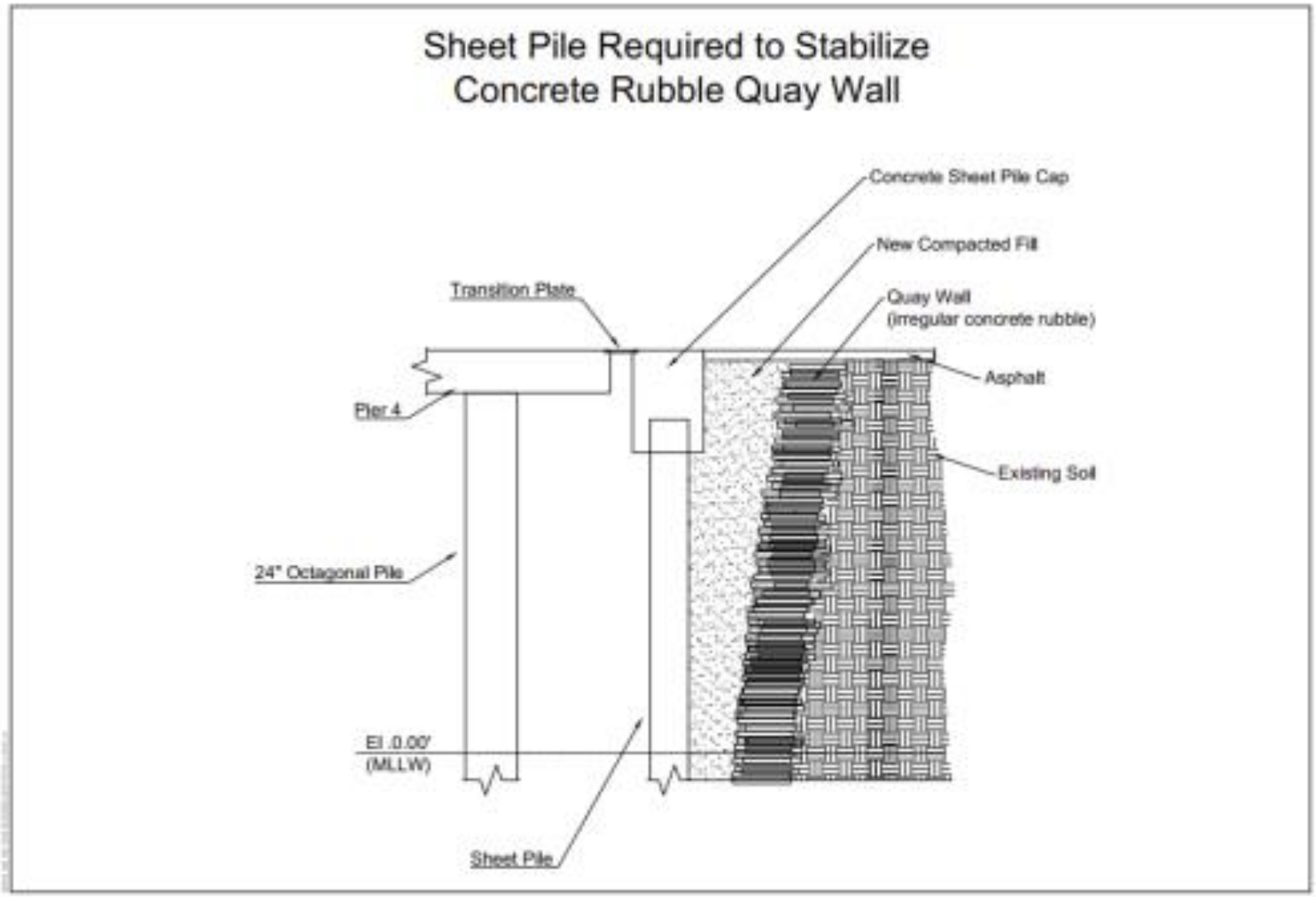


FIGURE 2-7

Pier 4 Quay Wall Cross-Section

HII San Diego Shipyard Marginal Wharf Repair and Pier Replacement Addendum

DUDEK

Component 2 - Removal and Improvement of Pier 4/Wharf 4 Deck

The 2019 Final MND did not analyze any changes to Pier 4, with the exception of as-needed pile replacement. Pier 4 is a 704-foot-long pier consisting of a 478-foot-long timber access pier inshore, and a 226-foot-long concrete structure at the seaward end (see Figure 2-8, Existing Conditions of Pier 4, Wharf 4 and Pier 5). The support system for the timber portion of the pier was upgraded approximately 8 years ago, including new steel H-piles and steel channel pile caps.

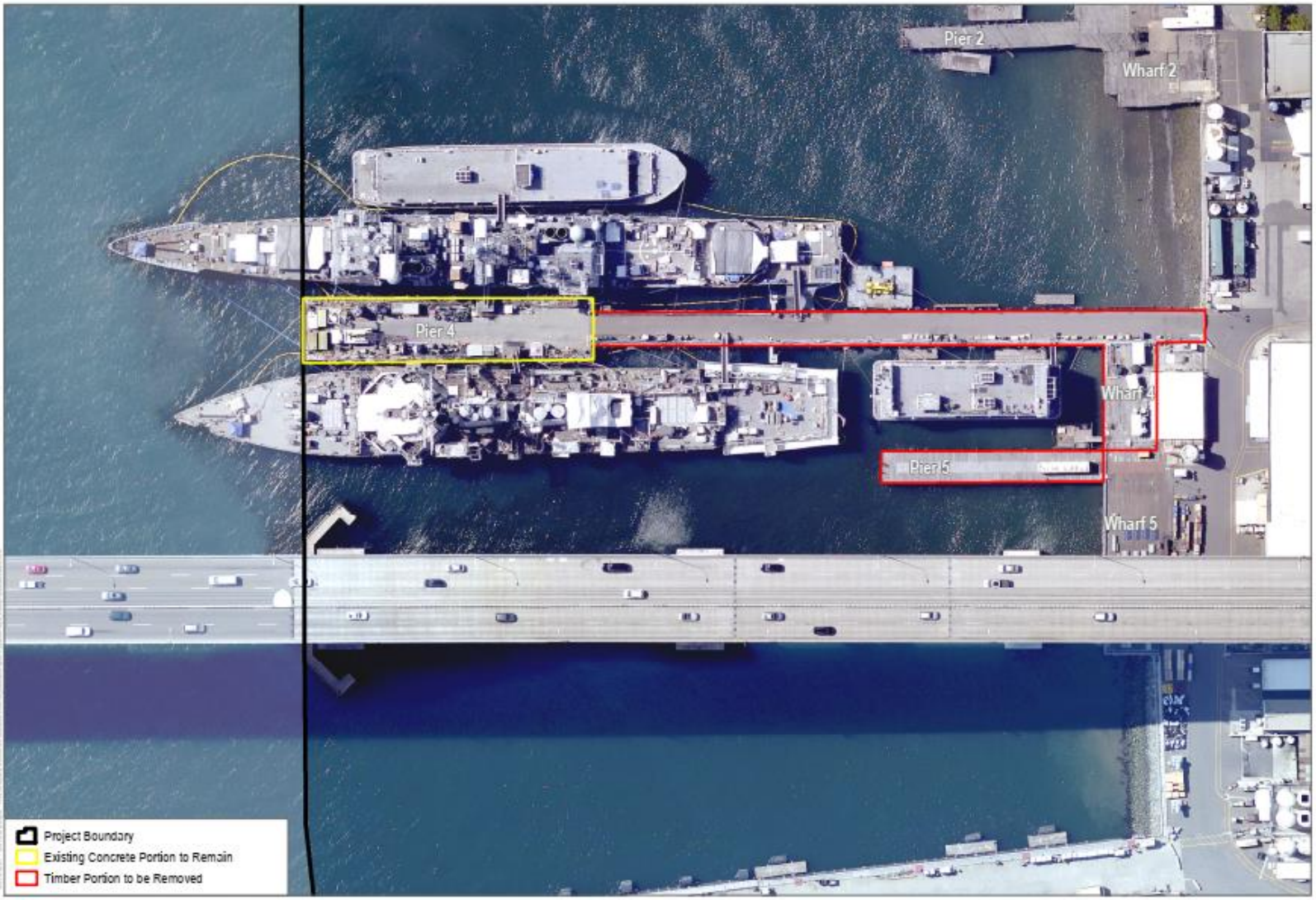
The Updated Project would include the following at Pier 4 (see Figure 2-9, Proposed Conditions of Pier 4 and Wharf 4 under the Updated Project):

(1) Demolition of the 478-foot-long by 26-foot-wide (12,428 SF) timber portion of the Pier 4 deck and improvement with a 478 foot-long by 47-foot-wide (22,466 SF) concrete deck.
(2) Demolition of five (5) mooring dolphins (108 SF total) associated with Pier 4.
(3) Demolition of timber Marginal Wharf 4 (3,583 SF) and improvement with a concrete wharf (3,070 SF).

The Updated Project proposes to replace the old 478-foot-long by 26-foot-wide (12,428 SF) timber section of the Pier 4 deck with a 478 foot-long by 47-foot-wide (22,466 SF) concrete deck (Figure 2-9) that would match the existing 47-foot-wide concrete section of Pier 4. The improvement of Pier 4 includes removal and replacement of 170 18-inch deteriorated timber support piles, 82 HP18 steel fender H-piles, and 52 16-inch square timber fender piles. The improved deck would be connected to the existing concrete portion of the pier with an expansion joint. The pier would continue to extend a total of approximately 704 feet into San Diego Bay. The new concrete improved pier would be equipped with four fender stations and 11 floating marine camels and would be supported by 90 24-inch octagonal concrete support piles, 20 24-inch square concrete fender piles and 71 12-inch round fiberglass fender piles.

The existing 10,638 SF concrete portion of Pier 4 would remain in place under the Updated Project. Some minor additions would also be made to the existing concrete portion, including equipping the concrete portion with six fender stations and two corner fender systems (Figure 2-9).

The Updated Project also would include the construction of a 3,070 SF concrete deck at Wharf 4, which would extend the wharf approximately 43 feet into San Diego Bay and encompass approximately 71 feet of nearshore area (Figure 2-9). The construction of the new Wharf 4 area would require the removal of 47 18-inch timber piles and the installation of 15 24-inch octagonal concrete support piles.



SOURCE: SANGIS 2017, 2021

DUDEK 0 50 100 Feet

FIGURE 2-8

Existing Conditions of Pier 4, Wharf 4 and Pier 5

HII San Diego Shipyard Marginal Wharf Repair and Pier Replacement Addendum

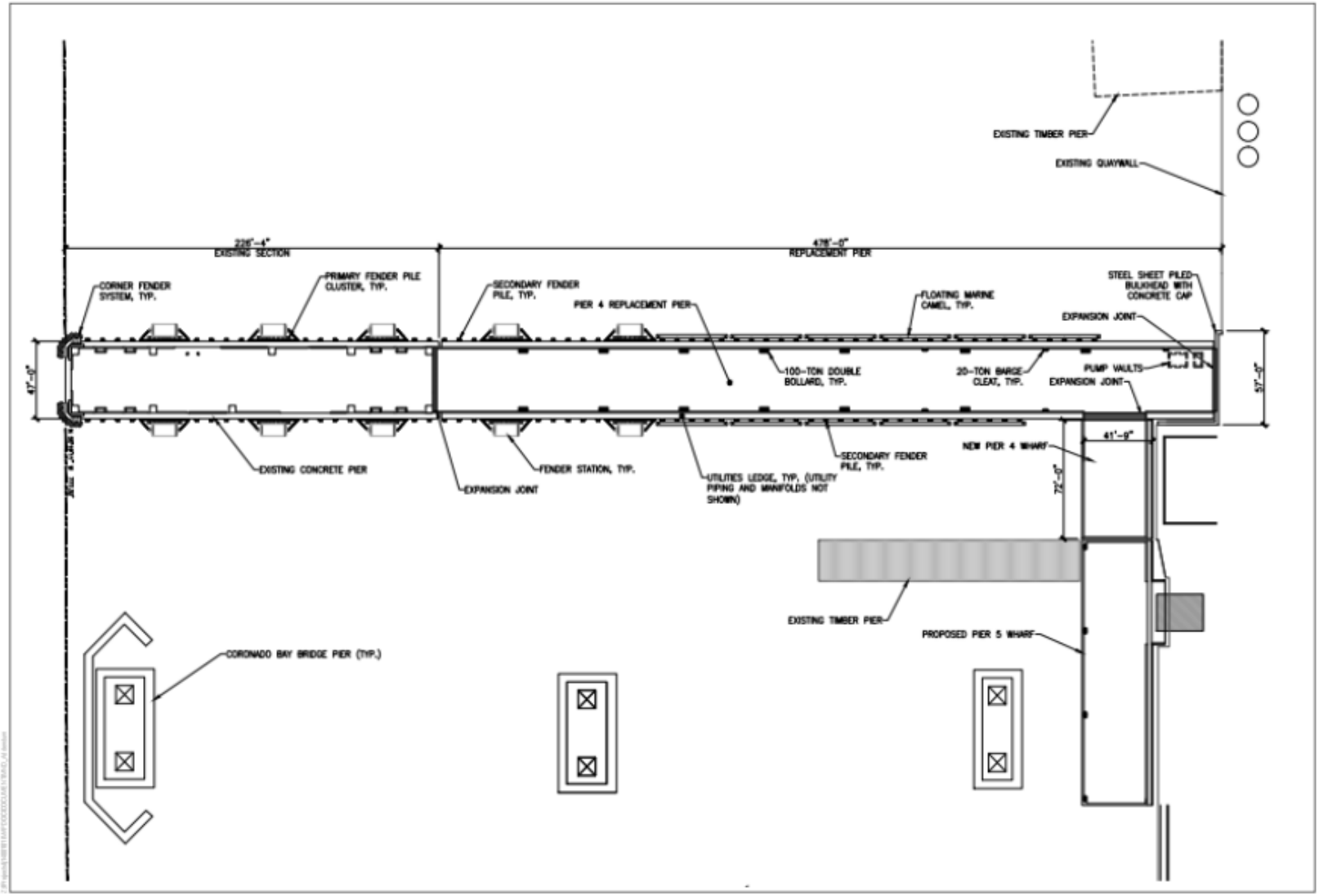


FIGURE 2-9

Proposed Conditions of Pier 4 and Wharf 4 Under the Updated Project

HII San Diego Shipyard Marginal Wharf Repair and Pier Replacement Addendum

DUDEK

Component 3 – Removal of Deteriorated Piers

The Updated Project proposes the complete removal of Piers 1, 5 and 7 along with their deteriorated support piles. Removal of these existing wooden piles without replacement would reduce the amount of construction for the Updated Project, compared to the Original Project. The removal of Piers 1, 5, and 7 is discussed further below.

Removal of Pier 1

The 2019 Final MND did not analyze any changes to Pier 1, with the exception of as-needed pile replacement; however, the MND did analyze a new configuration of Wharf 2 that would extend 50 feet into the Bay and encompass 216 feet of the near-shore areas currently associated with both Piers 1 and 2. Thus, an approximately 975 SF section of Pier 1 was demolished in order to allow for construction of the newly configured Wharf 2. Due to the deteriorated condition of Pier 1 and associated safety concerns, the Updated Project now proposes to remove the remaining 6,425 SF[2] timber portion Pier 1. The pier and its associated 118 wooden piles would be removed and would not be replaced (see Figure 2-4, Proposed Conditions for the Original Project versus Updated Project).

Removal of Pier 5

The 2019 Final MND did not analyze any changes to Pier 5, with the exception of as-needed pile replacement. Due to the deteriorated condition of Pier 5 and safety concerns, Pier 5 is currently not being utilized. The Updated Project proposes to demolish the 172-foot x 24-foot (4,128 SF) timber pier, including its timber deck and 72 deteriorated timber piles. The pier and the piles would be removed and would not be replaced (Figure 2-9).

Removal of Pier 7

The 2019 Final MND analyzed the removal of damaged portions of Pier 7 and the like-for-like reconstruction of the 19,405 SF pier with concrete decking for use as a storage and staging area. Due to the deteriorated condition of Pier 7 and associated safety concerns, the Updated Project proposes to remove the remaining portions of Pier 7, which includes approximately 3,571 SF of timber deck and 85 wooden piles. The pier and the piles would be removed and would not be replaced in the Updated Project (Figure 2-4).

Pile removal for the Updated Project would include the removal of 626 piles and replacement of 196 piles.

2.2.3 Updated Project Construction

Construction activities for the Updated Project are anticipated to begin in the mid-to-late 2022 and would be completed in by the end of 2026. Typical daily construction hours are expected to be from 7:00 AM to 4:00 PM Monday through Friday and are anticipated to require 5 construction workers per phase of construction. Construction would occur over two phases as discussed below.

[2] Including a 585 SF section of Pier 1 that has already collapsed.

Phase 1

Phase 1 would involve the removal of existing rubble and reinforcement of the existing quay wall. This phase would begin in late 2022 and end in mid-2023 and would take approximately 3 months to complete. The construction of the Phase 1 components is discussed in more detail below.

Rubble Removal

Approximately 20 to 25 tons of rubble would be removed from the intertidal area along the quay wall between Wharf 2 and Pier 4. The rubble would be removed from the landside using an excavator to extract the rubble without disturbing the bay bottom. Once removed, the majority of the rubble will be reused to reinforce the existing quay wall. A small portion may be disposed of at the Otay Landfill if needed. The removal of rubble from this area would increase the availability of soft bottom habitat suitable for eelgrass growth.

Reinforcement of Quay Wall

Portions of the existing concrete rubble quay wall would be reinforced, including a 425-linear foot stretch along the shoreline from Pier 1 to Pier 4 and a 160-linear foot stretch along Wharf 7 (Figure 2-5). The quay wall reinforcement would be conducted via landside by installing steel sheet pile (type ZZ 26-700) along the outer edge of the quay wall. Installation of the sheet piles would require the use of a crane and a vibratory hammer. The vibratory hammer would be utilized until reaching a point of refusal at which time an impact hammer would be used if necessary. A concrete cap would be installed on top of the sheet pile. The area between the existing angled quay wall and proposed straight vertical sheet pile reinforcement (void) would be backfilled with cementitious slurry using a tremie pipe (Figures 2-6 and 2-7). As the void is filled with slurry, the displaced seawater would be pumped out to the HII San Diego Shipyard's on-site wastewater treatment facility, where the water would be treated and disposed of in the City of San Diego's sewage system. The newly installed sheet pile would be sufficiently water-tight so that no slurry would be lost in the bay, and bay water (from outside the new quay wall) would not come into contact with the cementitious slurry or hardened product. Standard best management practices (BMPs) would be used as discussed below.

Phase 2

Piers 1, 5, and 7 would be removed in conjunction with the Pier 4 and Wharf 4 removal and replacement during Phase 2. This phase would begin in late 2023 and end in late-2026. Active work would take place between September 15 and March 31 annually to avoid the California least tern nesting season and would take approximately 8 months spread out over a 4 year period (2023-2026).

Demolition of Pier 1, 5 and 7

The timber decks of Piers 1, 5 and 7 would be removed using hand cutting tools. The decks would be dismantled and placed onto a work barge for future disposal. A debris boom would be in place to ensure no debris would fall into the water.

Removal and demolition of the existing piers and wharf deck structures would be accomplished utilizing hand tools. Existing piles would be extracted via crane and vibratory hammer. Old materials would then be loaded into dumpsters located on a deck barge. Replacement for all piles, when feasible, would be completed using a vibratory hammer to reduce noise and vibratory impacts to the surrounding environment.

Demolition and Construction of Timber Portion of Pier 4/Wharf 4

The removal of Pier 4 and Wharf 4 is anticipated to occur in late 2023. Demolition of Pier 4 and Wharf 4 and construction of Pier 4 would be contingent on the ship repair schedule in the facility. The timber decks of Pier 4 and Wharf 4 would be removed using hand cutting tools. The decks would be dismantled and placed onto the barge for future disposal at the Otay Landfill. A debris boom would be in place to ensure no debris falls into the water. Project construction would take place between September 15 and March 31 annually to avoid the California least tern nesting season.

Installation of all piles, when feasible, would be completed using a vibratory hammer to reduce noise and vibratory impacts to the surrounding environment. For piles requiring deeper penetration (i.e., concrete support piles), an impact hammer may be necessary. The vibratory or impact hammer would be transported to the project site via barge and tugboat. Once on the site, the hammer would be connected directly to the crane (located on the same barge), which is utilized to conduct hammering. Concerning pile driving, the majority of the piles would require 2 to 3 minutes of vibratory hammer per pile or 50 blows if using an impact hammer. Piles installed in depths greater than 25 feet would require 2 to 3 minutes of vibratory hammer per pile and approximately 100 blows with the impact hammer.

Concrete decking and fender stations would be assembled following installation of support piles. The construction of Pier 4 would take place between September 15 and March 31 annually to avoid the California least tern nesting season. Construction of this component would begin in late 2023 and would be actively worked on for 8-months spread out over a 4-year period. Typical daily construction hours are expected to be from 7:00 AM to 4:00 PM Monday through Friday. All construction will be completed in daylight and clear conditions. All work will be performed within the HII San Diego Shipyard's leasehold.

Table 2-1 summarizes the area of impact for the Updated Project.

INTENTIONALLY LEFT BLANK

Table 2-1. Updated Project Component Summary

Component	Existing Pier Area (SF)*	Proposed Pier Area (SF)	Range of Water Depth	Existing Wharf Area (SF)*	Proposed Wharf Area (SF)	Net Change in Over-water Coverage** (SF)	Piles to be Removed (Total of 626 Piles)	Piles to be Replaced (Total of 196 Piles)	Net Change in Piles and Fill Area	Proposed Construction Date***
Pier 4 (Replacement) Wharf 4 (Replacement)	23,066[a]	33,104[b]	-1.2 to -38.3 ft MLLW	3,583	3,070	+9,525	Pier 4 18”-diameter timber support piles (170) HP18 steel fender H-piles (82) 16” square timber fender piles (52) Wharf 4 18”-diameter timber support piles (47)	Pier 4 24” octagonal concrete support piles (90) 24” square concrete fender piles (20) 12” round fiberglass fender piles (71) Wharf 4 24” octagonal support piles (15)	Pier 4 -123 piles +13 SF Wharf 4 -32 piles -33 SF	Phase 2 2023-2026
Pier 1 (Remaining Demolition)	6,425[c]	—	0 to -25 ft MLLW	n/a[c]	n/a[c]	-6,425	18”-diameter timber support piles (118)	None – Pier 1 to be removed and not replaced	-118 piles -208 SF	Phase 2 2023-2026
Pier 5 (Demolition)	4,128	—	-3.5 to -20 ft MLLW	n/a[d]	n/a[d]	-4,128	18”-diameter timber support piles (72)	None – Pier 5 to be removed and not replaced —	-72 piles -127 SF	Phase 2 2023-2026
Pier 7 (Remaining Demolition)	3,571[e]	—	-5.2 ft to -24.0 ft MLLW	n/a[f]	n/a[f]	-3,571	18”-diameter timber support piles (85)	None – Pier 7 to be removed and not replaced-	-85 piles -150 SF	Phase 2 2023-2026
Quay Wall Reinforcement	n/a	n/a	n/a	n/a	n/a	n/a	n/a	585 linear feet sheet pile	+585 linear feet sheet pile +31.9 SF[g]	Phase 1 2022-2023
Total	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**-4,599 sf**	**-626 piles -989 SF**	**+196 piles +515 SF**	**-430 piles -474 SF**	**n/a**

Notes:
ft = feet; MLLW = MLLW; n/a = not applicable; sf – square feet
* Existing pier and wharf calculations differ from the existing conditions identified in the 2019 Final MND which were based on conceptual drawings. Since the adoption of the Final MND, HII San Diego Shipyard has entered the final design process for the project and is now able to provide a more accurate, detailed description of the existing conditions square footage breakdown.
** Net change in over-water coverage accounts for change in both pier area and wharf area.
*** All demolition will occur between September 15 and March 31 annually to avoid the California least tern nesting season.
a Existing Pier 4 area includes concrete deck at end of the pier that would remain in place during project (10,638 sf) and timber deck to be removed as part of the project (12,428 sf).
b Proposed Pier 4 area includes concrete deck at end of the pier that would remain in place during project (10,638 sf) and timber deck removal and improvement (22,466 sf). Fenders and/or camels (3,299 sf) are not included in this area.
c Note that a portion of Pier 1 (~975 sf) was removed to accommodate Wharf 2 as part of the Original Project. The remainder of Pier 1 (~6,425 sf, including a 585 sf portion that has already collapsed) will be removed as part of the Updated Project.
d Wharf 5 is part of the Original Project and no changes to this wharf are proposed as part of the Updated Project.
e Note that a portion of Pier 7 (~2,835 sf) was removed as part of the Original Project. The remainder of the Pier 7 (~3,571 sf) would be removed as part of the Updated Project.
f Wharf 7 is part of the Original Project and no changes to this wharf are proposed as part of the Updated Project.
g. This number represents the fill area associated with the installation of the sheet pile. Cement will be poured behind the sheet pile wall to fill in the space between the existing angled quay wall slope and the straight vertical sheet pile reinforcement. However, the sheet pile will be driven vertically at the toe of the existing quay wall slope to the maximum extent practicable to minimize the area of cementitious fill contacting the bay bottom.

INTENTIONALLY LEFT BLANK

Overwater Coverage

The removal and improvement of the timber portions of Pier 4 and the Wharf 4 deck will result in an increase in overwater coverage of 9,525 sf. However, the removal of Piers 1, 5, and 7, as well as the removal of the Original Project components will result in a reduction of 20,328 sf of overwater coverage resulting in a total reduction of 10,803 sf of overwater coverage once all components of the original and updated projects are implemented. Table 2-2 provides a breakdown on the overwater coverage calculation with the Original Project components and the shading calculation with the Updated Project components.

Table 2-2. Overwater Coverage Summary for Original Project and Updated Project*

Component	Existing Pier Area (sf)*	Proposed Pier Area (sf)	Existing Wharf Area (sf)*	Proposed Wharf Area (sf)	Net Change in Overwater Coverage (sf)
Original Project Components					
Pier 1 (Partial Demolition to accommodate Wharf 2 Repair)[a]	7,400	6,425	n/a	n/a	-975
Pier 2 (Demolition)/Wharf 2 (Repair)	4,354	0	7,404	10,800	-958
Wharf 5 (Repair)	n/a[b]	n/a[b]	6,861	6,861	0
Pier 7 (Partial Demolition)[c]/Wharf 7 (Repair)	6,406	3,571	7,768	6,332	-4271
Updated Project Components					
Pier 4 (Improvement)/ Wharf 4 (Improvement)	23,066	33,104	3,583	3,070	+9,525
Pier 1 (Remaining Demolition)[a]	6,425	0	n/a	n/a	-6,425
Pier 5 (Demolition)	4,128	0	See above[d]	See above[d]	-4,128
Pier 7 (Remaining Demolition)[c]	3,571	0	See above	See above	-3,571
				Total Overwater Coverage	-10,803

Notes:
sf – square feet

* Existing pier and wharf calculations differ from the existing conditions identified in the 2019 Final MND. The existing conditions as described in the 2019 Final MND were based on conceptual drawings. Since the April 2019 adoption of the Final MND, HII San Diego Shipyard has entered the final design process for the project and is now able to provide a more accurate, detailed description of the existing conditions, including a more accurate square footage breakdown of the existing conditions.

a A portion of Pier 1 (~975 sf) was removed as part of the Original Project to accommodate Wharf 2. The remainder of Pier 1 (6,425 sf, including a 585 sf portion that has already collapsed) will be removed as part of the Updated Project.

b Removal of Pier 5 was not analyzed in the Original Project. Pier 5 is being removed in the Updated Project.

c A portion of Pier 7 (~2,835 sf) was removed as part of the Original Project. The remainder of Pier 7 (~3,571 sf) would be removed as part of the Updated Project.

d Wharf 5 is being replaced under the Original Project.

Quay Wall Cementitious Slurry Fill

The existing quay wall is currently located a few feet east of the surveyed US Bulkhead Line. Due to the irregular alignment and angle of the existing quay wall, the width of the backfill area behind the proposed straight sheet pile wall varies. The total area associated with the sheet pile installation would be 31.9 square feet, and the total area associated with the cementitious fill is 1,337 square feet. However, the sheet pile would be driven vertically at the toe of the existing quay wall slope to the maximum extent practical to minimize the area of cementitious fill contacting the bay bottom. The cementitious fill area would fill in the space between the existing and angled quay wall slope and the straight vertical sheet pile reinforcement. Further, because the sheet pile would be driven along the U.S. Bulkhead Line, the bay bottom would not be impacted beyond the U.S. Bulkhead line (see Figures 2-6 and 2-7) Thus, the installation of the new quay wall and subsequent fill of cementitious slurry will not result in the permanent loss of US waters in San Diego Bay.

Best Management Practices

Consistent with the Original Project, the following BMPs would be implemented to minimize impacts from the Updated Project on the surrounding environment.

(1) Turbidity - A silt curtain would be in place at all times, fully enclosing the construction area during pile removal and installation to contain sediment that may be temporarily stirred up. Piles would be removed and installed slowly in order to minimize sediment disturbance and turbidity in the water column.

(2) Noise Disturbance- A vibratory hammer would be used to the maximum possible extent. The contractor would limit the use of impact hammers as much as possible to minimize noise disturbance. When an impact hammer is necessary, noise dampening techniques (including the use of a nylon or wooden block between the impact hammer and piles, use of the slow-start method, and use of the smallest feasible hammer) would be employed to dampen underwater noise. In addition, a protected species observer would be present during pile driving activities to observe the project area for protected species.

(3) Debris Capture - A debris boom would be installed to capture debris while timber decks are being dismantled. Debris would be collected and disposed of.

(4) Debris Disposal – HII San Diego Shipyard would supply plastic lined skip tubs for the contractor to use for placing the debris into. The contractor shall furnish and install all materials necessary to line the skip tubs with a plastic liner prior to the placement of the debris into the skip tubs. All debris would be disposed of at an upland facility.

(5) Stormwater Runoff – HII San Diego Shipyard employs a fully contained stormwater diversion system to minimize stormwater runoff to San Diego Bay during project construction and operations.

For cementitious slurry fill, the following BMPs may be used to avoid potential impacts to the surrounding water of the US:

(1) Monitor pH of surrounding waters while slurry fill while pouring is underway and postconstruction.

(2) Although the joints of the sheet pile wall should be sufficiently water-tight and should prevent any leakage of cementitious slurry, a silt curtain would be deployed to prevent any incidental slurry migration.

(3) Water between the existing and proposed bulkhead would be pumped out directly to HII San Diego Shipyard's on-site wastewater treatment facility, where the water would be treated and disposed to the City of San Diego's sewage system.

2.2.4 Updated Project Operation

The change in the shape and size of Pier 4 and Wharf 4, removal of Piers 1, 5 and 7 and reinforcement of the existing quay wall would not result in an additional number of ships being repaired at the facility or other changes to the facility operations. Thus, similar to the Original Project, the Updated Project would not result in an increase in operations or an intensification of use; nor would it result in any additional employees, other than those needed during construction.

2.2.5 Updated Project Permitting

Pre-construction Activities

The Updated Project is anticipated to be permitted per a Section 401 Water Quality Certification issued by the San Diego Regional Water Quality Control Board and per a letter of permission issued by the Army Corps of Engineers that allows for the repair, rehabilitation, replacement or removal of previously authorized or currently serviceable structures within waters of the U.S. As such, prior to initiating construction in the waters, HII San Diego Shipyard shall submit to the ACOE Regulatory Division a complete set of construction plans showing all work and structures in the waters of the US. A pre-construction survey of each project area for *Caulerpa taxifolia* (Caulerpa) would be conducted in accordance with the Caulerpa Control Protocol (National Marine Fisheries Service) and would be completed and submitted to the ACOE no more than 90 days prior to start of construction. In the event that Caulerpa is detected in the area, no work shall commence until the infestation has been isolated and treated as confirmed in writing by the ACOE Regulatory Division. In addition, due to the presence of eelgrass on-site, preconstruction eelgrass surveys would be conducted, as discussed in the biological resources section of this document. The locations of the eelgrass beds would be documented, and their potential impacts and mitigation (if necessary) addressed in coordination with the National Marine Fisheries Service. Once construction has been completed for each phase, a post-construction survey shall be completed within 30 days.

Post-construction Activities

Due to the presence of eelgrass on-site and anticipated impacts to eelgrass from the project, post construction eelgrass surveys would be conducted. During transfer to shore, piles would be cut and placed directly into closed-top dumpsters. The cutting of piles requires special worker health and safety program including respiratory protection.

INTENTIONALLY LEFT BLANK.

3 Environmental Checklist for Subsequent Environmental Review

3.1 Explanation of Checklist Evaluation Categories

The purpose of this checklist is to evaluate whether any of the conditions identified in CEQA Section 21166 or CEQA Guidelines Section 15162 requiring the preparation of a subsequent MND would occur with respect to the Updated Project as compared to the project analyzed in the 2019 HII San Diego Shipyard Inc. Marginal Wharf Repair and As-Needed Pile Replacement Project Final MND (Unified Port District #MND-2019-013; State Clearinghouse #2019011069). The row titles of the checklist include the environmental topics presented in Appendix G of the State CEQA Guidelines as applicable to the analysis presented in the 2019 Final MND. The column titles of the checklist have been modified from the format presented in Appendix G to incorporate the criteria of CEQA Section 21166 and State CEQA Guidelines Section 15162 addressing when a subsequent analysis or an addendum to a Negative Declaration shall be prepared. A "no" answer indicates that the Updated Project presents no change in the condition or status of an impact previously analyzed and adequately addressed with mitigation measures in the 2019 Final MND. This analysis found that the environmental topics might be answered with a "no" in the checklist because the impact associated with the Updated Project was adequately addressed in the 2019 Final MND, and the environmental impact significance conclusions of the 2019 Final MND remain applicable for the Updated Project. The purpose of each column of the checklist is further described below.

3.1.1 Any Project Changes or New Circumstances Involving New or Substantially More Severe Significant Impacts?

Pursuant to Sections 15162(a)(1) and 15162(a)(2) of the CEQA Guidelines, this column indicates whether there have been substantial changes proposed to the approved project or changes in the circumstances under which the project is undertaken that have occurred subsequent to the adoption of the 2019 Final MND, which would result in the Updated Project having new significant environmental impacts that were not identified in the prior environmental document or would result in substantial increases in the severity of previously identified significant impacts.

3.1.2 Any New Information of Substantial Importance?

Pursuant to Section 15162(a)(3)(A-D) of the CEQA Guidelines, this column indicates whether new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental documents were adopted as complete is available, requiring an update to the analysis of the previous environmental documents to verify that the environmental conclusions and mitigation measures remain valid. New information is considered to be of "substantial importance" if it shows that one or more of the following would result: (A) the project would have one or more new significant effects not discussed in the prior environmental documents; or (B) that significant effects previously examined would be substantially more severe than shown in the prior environmental documents; or (C) that mitigation measures previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure; or (D) that mitigation measures which are considerably different from those analyzed in the prior environmental document would

substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure.

If there is new information of substantial importance, the question would be answered 'Yes' and require preparation of a subsequent Negative Declaration. However, if the additional analysis completed as part of this Environmental Checklist Review finds that the conclusions of the prior environmental document remain the same and no new significant impacts are identified, or identified significant environmental impacts are not found to be substantially more severe, the question would be answered 'No' and no subsequent Negative Declaration would be required.

3.2 Discussion and Mitigation Sections

3.2.1 Discussion

Chapter 4 includes separate discussions for each of the environmental topics that were considered in the 2019 Final MND and required mitigation measures. Each discussion begins with an overview of what was discussed and concluded in the 2019 Final MND, and identifies what, if any, impacts were concluded for that topic, followed by a summary of the changes in the project and changes in circumstances or new information of substantial importance as it relates to that topic. These details are then the focus of the rest of the environmental analysis, in accordance with State CEQA Guidelines Section 15162(a). The summary comparison of the Updated Project to the Original Project, evaluated in the 2019 Final MND, provided in Table 3-1 was used to inform preparation of the environmental checklist.

Table 3-1. Overview of Project Changes

Topic	Original Project	Updated Project
Wharf 2	The project evaluated in the 2019 Final MND included the replacement of the existing Wharf 2 in its current location. The new configuration of Wharf 2, under the 2019 Final MND, would extend 50 feet into the Bay and encompass 216 feet of the near-shore areas currently associated with both Piers 1 and 2 and would be within close proximity to Pier 4.	Under the Updated Project, no changes to Wharf 2 would occur compared to what was analyzed in the 2019 Final MND.
Pier/Wharf 4	Aside from as-needed pile replacements, the 2019 Final MND did not analyze any changes to Pier 4 / Wharf 4.	The Updated Project would involve: Demolition of 478-foot-long by 26-foot-wide (12,428 SF) timber portion of Pier 4 and improvement with a 478 foot-long by 47-foot-wide (22,466 SF) concrete pier. Demolition of five (5) mooring dolphins (108 SF total) associated with Pier 4. Demolition timber Marginal Wharf 4 (3,583 SF) and replacement with a concrete wharf (3,070 SF). The Updated Project proposes to replace the old timber section of Pier 4 with a 478

Table 3-1. Overview of Project Changes

Topic	Original Project	Updated Project
		foot-long by 47-foot-wide (22,466 SF) concrete deck. See Section 2.2.2 for additional details on Wharf/Pier 4 removal and improvement. The Updated Project would include the removal and improvement of the old timber Wharf 4 with a 3,070 SF concrete deck, which would extend approximately 43 feet into San Diego Bay and encompass approximately 71 feet of nearshore area.
Wharf 5	The project evaluated in the 2019 Final MND would include the replacement of the existing 109 piles at Wharf 5 with 30 concrete piles. Subsequently, the existing wooden deck would be replaced with a concrete deck, resulting in a reduction in overwater coverage of 4,416 SF. The restored wharf would extend 45 feet into the Bay and would span 160 feet along the quay wall.	Under the Updated Project, no changes to Wharf 5 would occur compared to what was analyzed in the 2019 Final MND. The existing and proposed footprint of Wharf 5 was corrected during final design to 6,861 SF and 6,861 SF, respectively, resulting in no change in over-water coverage.
Wharf 7	Under the project evaluated in the 2019 Final MND, Wharf 7 would be reconstructed in the same location prior to its demolition by a storm and the remaining damaged portions of Pier 7 would be removed. While complete design and timing was conceptual, the analysis presented in the 2019 Final MND assumed that the new Pier 7 and Wharf 7 would consist of 19,405 SF and 8,140 SF, respectively, which would be the same as the former Pier 7 and Wharf 7; thus, there would be no change in overwater coverage. The new Pier 7 and Wharf 7 would be constructed with concrete piles and concrete decking for use as a storage and staging area.	Under the Updated Project, no changes to Wharf 7 would occur compared to what was analyzed in the 2019 Final MND. The existing and proposed footprint of Wharf 7 was corrected during final design to 7,768 SF and 6,332 SF, respectively.
Quay Wall	Improvements to the quay wall were not proposed under the 2019 Final MND.	The Updated Project would structurally reinforce the existing quay wall to bring these structures up to new engineering standards that would protect the existing structures, provide the ability of vessels to safely moor at the pier, and improve the safety of daily operations. Portions of the existing concrete rubble quay wall would be reinforced, including a 425-linear foot stretch along the shoreline from Pier 1 to Pier 4 and a 160-linear-foot stretch along Wharf 7 (see Section 2.2.2 for additional details).
Pier 1	Aside from as-needed pile replacements, the 2019 Final MND did not analyze any changes to Pier 1	The Updated Project proposes to demolish the remaining 6,425 SF of Pier

Table 3-1. Overview of Project Changes

Topic	Original Project	Updated Project
	(see Table 1, Project Component Summary.) Partial removal of Pier 1 (approximately 975 SF) was required under the Original Project in order to accommodate the new Wharf 2 (see Section 2.2.2 and Figure 2-3 for details)	1, including its deteriorated timber deck and 118 timber support piles. The pier and associated piles would not be replaced.
Pier 2[3]	Under the project evaluated in the 2019 Final MND, Pier 2 would be demolished and not rebuilt.	Under the Updated Project, no changes to Pier 2 would occur compared to what was analyzed in the 2019 Final MND.
Pier 5	Aside from as-needed pile replacements, the 2019 Final MND did not analyze any changes to Pier 5 (see Table 1, Project Component Summary).	The Updated Project proposes to demolish the 172-foot x 24-foot (4,128 SF) timber pier, including its timber deck and 72 deteriorated timber piles (see Section 2.2.2 and Figure 2-4 for details). The pier and associated piles would not be replaced.
Pier 6	Aside from as-needed pile replacements, the 2019 Final MND did not analyze any changes to Pier 6 (see Table 1, Project Component Summary.)	Under the Updated Project, no changes to Pier 6 would occur compared to what was analyzed in the 2019 Final MND.
Pier 7	The 2019 Final MND analyzed the removal of damaged portions of Pier 7 and the like-for-like reconstruction of the 19,405 SF pier with concrete decking for use as a storage and staging area.	The Updated Project proposes to demolish the remaining portions of Pier 7, which includes approximately 3,571 SF of timber deck and 85 wooden piles (see Section 2.2.2 and Figure 2-4 for details)
Construction Activities		
Time of day	Typical daily construction hours are expected to be from 7:00 AM to 4:00 PM Monday through Friday.	No change compared to the 2019 Final MND.
Duration	4 years/4 phases	4 years/2 phases
Activities	Removal and demolition of the existing pier and wharf structures would be accomplished utilizing hand tools. Existing piles would be extracted via crane. Old materials would then be loaded into dumpsters located on a deck barge. Replacement for all piles, when feasible, would be completed using a vibratory hammer to reduce noise and vibratory impacts to the surrounding environment. For piles requiring deeper penetration (i.e., concrete support piles), an impact hammer may be necessary. The vibratory or impact hammer would be transported to the project site via barge and tugboat. Once on-site, the hammer would be connected directly to the crane (located on the same barge), which is utilized to conduct hammering. Concerning pile driving, the majority of	No change compared to the 2019 Final MND.

[3] Note: Pier 3 has not been in existence for several decades

Table 3-1. Overview of Project Changes

Topic	Original Project	Updated Project
	the piles would require 2 to 3 minutes of vibratory hammer per pile or 50 blows if using an impact hammer. Piles installed in depths greater than 25 feet, would require 2 to 3 minutes of vibratory hammer per pile and approximately 100 blows with the impact hammer.	
Disposal of Removed Piles and Debris	For each phase of the project, a contractor would be responsible for the disposal of the removed piles and debris at the Otay Landfill. The contractor would temporarily place the piles within dumpsters or "skip tubs" located on the flattop barge and would be responsible for cleaning up the marine growth and activity-generated debris. "Skip tubs" are large open-topped waste containers designed for loading onto haul trucks. Removed piles would be transported to the Otay Landfill the same day the dumpster or "skip tub" is loaded. Piers would be restored to pre-construction conditions as part of the project. Prior to any removed piles leaving the facility, the contractor would provide the HII San Diego Shipyard the appropriate information regarding the intended disposal site (Otay Landfill) and a copy of all shipping documents. All work would be performed within the project site.	No change compared to 2019 Final MND.
Rubble Removal	No rubble was proposed to be removed in the 2019 Final MND	The Updated Project proposes to remove approximately 20 to 25 tons of rubble from the intertidal area along the quay wall between Wharf 2 and Pier 4. Once removed, the majority of the rubble will be repurposed on site. A small portion may be disposed of at the Otay Landfill.
Construction Equipment	Hand tools for removal and demolition of existing pier and wharf structures, cranes, vibratory hammer, impact hammer (for piles requiring deeper penetration, such as concrete support piles)	No change compared to the 2019 Final MND.
Operations		
Employees	The project evaluated in the 2019 Final MND would not result in an increase in operations; nor would it result in any additional employees, other than those needed during construction	No change compared to the project evaluated in the 2019 Final MND.

3.2.2 Topics Not Considered

The following environmental topics were evaluated and not included in this environmental checklist as the conclusion to all questions in the Final MND was "no impact" and would remain the same with the Updated Project: Agriculture and Forestry Resources, Mineral Resources, Population and Housing, Public Services, Recreation, and Tribal Cultural Resources. The evaluation of these topics found that there are no new significant impacts, no changes in circumstances, or no new Information of substantial importance resulting from the Updated Project.

3.2.3 Mitigation Measures

The Mitigation Monitoring and Reporting Program (MMRP) for the 2019 Final MND includes mitigation measures to reduce impacts to biological resources, hazards and hazardous materials, hydrology and water quality, land use and planning, and noise.

More specifically, mitigation measures related to biological resources include MM-BIO-1, which requires construction monitoring for sensitive species; MM-BIO-2, which requires commencement of pile driving with a soft-start sequence prior to typical pile driving activities; MM-BIO-3, which requires and ensures deployment of a silt curtain around the pile-removal and pile-driving areas to restrict the surface visible turbidity plume to the area of removal and driving; and MM-BIO-4, which requires implementation of an eelgrass mitigation and monitoring plan. Mitigation measures related to hazards and hazardous materials include MM-HAZ-1, which requires that the contractor to ensure oils and fuels are contained in secondary containment structures; MM-HAZ-2, which requires hazards-related training for construction workers; MM-HAZ-3, which requires equipment inspection prior to commencing of any demolition or construction activities; MM-HAZ-4, which proper equipment instrumentation prior to commencing of any demolition or construction activities; MM-HAZ-5, which requires hazardous materials monitoring during construction; MM-HAZ-6, which requires oil/spill kits; MM-HAZ-7, which requires barge loading procedures; MM-HAZ-8, which includes procedures for removed pile placement; MM-HAZ-9, which requires cleanup of removed material; MM-HAZ-10, which requires sediment sampling and implementation of remediation measures at the conclusion of pile driving. MM-HAZ-1 through MM-HAZ-8, MM-HAZ-10, and MM-BIO-3 would all reduce impacts to hydrology and water quality to less than significant. MM-BIO-1 through MM-BIO-4 would also be applied to land use, to reduce impacts to less than significant. Lastly, MM-BIO-1 and MM-BIO-2 would also reduce impacts to noise to less than significant.

Applicable mitigation measures from the 2019 Final MND that would apply to the Updated Project are listed in Chapter 4 at the end of each environmental topic discussion provided in the Checklist.

4 Environmental Checklist

4.1 Aesthetics

Environmental Issue Area	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
I. AESTHETICS			
Would the project:			
a) Have a substantial adverse effect on a scenic vista?	No	No	No
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings with a state scenic highway?	No	No	No
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	No	No	No
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project as they relate to aesthetic resources; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted, as it relates to aesthetic resources.

4.1.1 Summary of 2019 Final MND

The 2019 Final MND did not identify any potentially significant impacts to aesthetic resources. The 2019 Final MND found that because the Original Project would be similar in bulk, footprint, and scale to the existing structures, there would be no impact to the existing visual character or quality of the site and its surroundings. The 2019 Final MND also found that the Original Project would not create a new source of substantial light or glare and no impacts would be created to day or nighttime views in the area.

The 2019 Final MND found that the Original Project had a less than significant impact on scenic vistas. Vista areas oriented toward the project site included the eastern edge of Coronado, and scenic vistas overlooking the project site at multiple locations along the Bayshore Bikeway and designated view corridors at 1st and 2nd Street. The 2019 Final MND found that the Original Project's construction equipment, including cranes and barges, would be visible from these scenic vistas. However, because use of cranes and barges were temporary and because the Original Project, as described in the 2019 Final MND, would be similar in scale to existing structures, no significant adverse impacts to scenic vistas would occur.

The Coronado Bridge, or State Route 75 (SR-75), is an Officially Designated State Scenic Highway, as described in the 2019 Final MND. Although the Coronado Bridge crosses the project site, the 2019 Final MND found that the Original Project's impacts to this scenic highway were less than significant because although construction equipment would be visible from the Coronado Bridge, it would have been temporary, similar to existing structures, and the bridge was suspended high above the project site making viewing difficult.

No mitigation measures or specific conditions were required under the 2019 Final MND.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. With regard to aesthetics, the Updated Project would result in removal and improvement of Pier 4/Wharf 4, removal of deteriorated Piers 1, 5 and 7, and reinforcement of the existing deteriorating quay wall. However, these changes would occur within the same project site as the Original Project that is already developed with similar structures. Therefore, with implementation of the Updated Project, aesthetics of the project site would be slightly altered compared to what was analyzed in the 2019 Final MND, but none of the requirements in Section CEQA 21166 or CEQA Guidelines Section 15162 would be triggered requiring a supplemental or subsequent MND.

4.1.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

No changes in circumstances or new information related to aesthetics, which were not known and could not have been known with the exercise of reasonable due diligence at the time the 2019 Final MND was adopted, have been identified during the preparation of this checklist.

4.1.3 Impact Analysis

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Scenic vistas to the project site continue to be available from the eastern edge of Coronado, multiple locations along the Bayshore Bikeway, as well as from the designated 1st and 2nd street view corridors. During construction, the crane and barge used to construct both the Original Project and the Updated Project would be visible from these identified scenic vista areas; however, these pieces of equipment would not represent a substantial variation from the predominantly industrial nature of the project site and surrounding areas. In addition, once the Updated Project is operational, the new structures would be similar

in footprint, bulk, and scale to the existing structures, structures analyzed to be replaced and reconstructed in the 2019 Final MND, and surrounding development. Therefore, the Updated Project would not result in any new or more severe significant impacts related to adverse effects on a scenic vista than what was analyzed in the 2019 Final MND.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As discussed above and in the 2019 Final MND, the Coronado Bridge, or SR-75, is an officially designated State Scenic Highway (Caltrans 2020). The Coronado Bridge traverses the project site in a northeast to southwest direction between existing Piers 5 and 6 but is suspended above the project site by approximately 150 feet in the northeastern portion of the site to approximately 200 feet in the southwestern portion of the site. Therefore, views of the project site from Coronado Bridge are limited as described in the 2019 Final MND.

Construction equipment introduced by the Updated Project would be temporary and, due to the elevation of the Coronado Bridge, would not represent a substantial variation from the predominantly industrial nature of the project site and its surroundings, as seen from the Coronado Bridge. Construction of the Updated Project would also remove deteriorating existing piers, rehabilitate an existing quay wall, and replace existing structures at Pier 4 with structures of a similar footprint, bulk and scale, which would improve the scenic resources viewed from the Coronado Bridge. Therefore, because the Updated Project involves removal and improvement of existing structures, and due to the elevation of the Coronado Bridge, the Updated Project would not damage scenic resources during operations. Thus, the Updated Project would not result in any new or more severe significant impacts related to scenic resources from a scenic highway than what was analyzed in the 2019 Final MND.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Like the Original Project, the Updated Project would involve the replacement and improvement of pier and wharf infrastructure in an industrial waterfront. When completed, the replaced structures at Pier 4 would be of a similar footprint, bulk and scale to the existing structure. There would also be an improvement in the existing visual environment with the removal of deteriorating piers and repair of the deteriorating quay wall. The project site is located in the PMP Planning District 4, which defines the site's land use designation as Marine Related Industrial, and the water use designation as Specialized Berthing. Operations under the Updated Project would remain consistent with these land and water use designations. Additionally, the project site is located in the Coastal Zone and subject to the California Coastal Act. The Updated Project would comply with all relevant California Coastal Act and PMP policies and regulations related to scenic quality. Thus, the Updated Project would not cause any new or more severe impacts to visual character than that of the Original Project that analyzed in the 2019 Final MND.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Like the Original Project, construction of the Updated Project would occur during daylight hours (between7:00 AM and4:00 PM) and the use of temporary construction lighting is, therefore, not anticipated. Existing light sources illuminate the project site at night. These light sources include boom lighting and mast lighting for security and operational activities. The project does not propose introducing new sources of light that would adversely affect day or nighttime views. Therefore, no new impacts would occur beyond what was analyzed in the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

There are no mitigation measures or specific conditions from the 2019 Final MND identified to reduce impacts related to aesthetics.

4.2 Air Quality

Environmental Issue Area	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
II. AIR QUALITY			
Would the project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	No	No	Yes
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	No	No	No
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	No	No	No
d) Expose sensitive receptors to substantial pollutant concentrations?	No	No	No
e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project, as they relate to air quality; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted.

4.2.1 Summary of 2019 Final MND

The 2019 Final MND found that the Original Project would not conflict with or obstruct implementation of an applicable air quality plan, as the project was consistent with the growth anticipated by the PMP and thus was consistent with the Regional Air Quality Strategy (RAQS) and State Implementation Plan (SIP). Since the project would involve demolishing, rehabilitating, and improving existing pier and wharf structures and existing operations would resume upon completion of construction activities, the 2019 Final MND found that the Original Project would not include components that would induce growth or change the use of the site. In addition, the 2019 Final MND found that pollutant emissions from the Original Project would be less than the San Diego Air Pollution Control District (SDAPCD) thresholds. Therefore, the Original Project's impacts would be less than significant and would not conflict with or obstruct implementation of the RAQS.

The 2019 Final MND found that the San Diego Air Basin (SDAB) was classified as an attainment area for all criteria air pollutants except ozone, respirable particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}), and respirable particulate matter with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$). Emissions of criteria pollutants nitrogen oxides (NO_x), volatile organic compounds (VOCs), PM_{10}, and $PM_{2.5}$ from the Original Project's construction were found to be below the applicable thresholds. Therefore, the 2019 Final MND found that the Original Project would not generate emissions in quantities that would result in an exceedance of the National Ambient Air Quality Standards (NAAQS) or the California Ambient Air Quality Standards (CAAQS) for ozone, PM_{10}, and $PM_{2.5}$. The MND also found that once construction is complete, the existing operations would resume and would not result in an increase in emissions above existing levels. Therefore, operational emissions would not be cumulatively considerable, and impacts would be less than significant.

In addition, because the Original Project would generate criteria pollutant emissions that would be temporary and well below established significance thresholds, the 2019 Final MND found that the Original Project would not expose sensitive receptors to substantial criteria pollutant concentrations nor would it result in substantial roadway congestion or intersection delays that would create carbon monoxide (CO) hot spots or exposure of sensitive receptors to substantial, project-generated, local CO emissions. impacts were found to be less than significant.

Finally, the 2019 Final MND found that the Original Project would not create objectionable odors that would affect a substantial amount of people and impacts would be less than significant.

No mitigation measures or specific conditions were required under the 2019 Final MND for air quality.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. The Updated Project would involve improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall. Construction of the Updated Project would occur over an approximately 4-year period and would take place between the hours of 7:00 AM and 4:00 PM. Air pollutant emissions during construction would result from operation of construction equipment and on road vehicles. Like the Original Project, construction equipment would include a tugboat, crane, vibration/impact hammers, and

barges; however, the proposed barges rely on the tugboats for power and movement and do not generate emissions. On road vehicles would include trucks used for hauling away the old piles/piers and rubble, and delivering new supplies, as well as construction worker commute vehicles. The number of haul trucks used would vary by phase depending on the number of piles to be replaced and the square footage of pier demolition and reconstruction; regardless of phase, however, the number of weekly haul truck trips would be minimal (2 haul truck trips per week on average)). Like the Original Project, it is anticipated that five construction workers would be present on-site each day during construction. Project construction would occur over two phases (Phase 1 would involve the removal of existing rubble and reinforcement of the existing quay wall. This phase would begin in late 2022 and end in mid-2023 and would take approximately 3 months to complete. Piers 1, 5, and 7 would be removed in conjunction with the Pier 4 and Wharf 4 removal and replacement during Phase 2. This phase would begin in late 2023 and end in mid-2026. Active work would take place between September 15 and March 31 annually to avoid the California least tern nesting season and would take approximately 8 months spread out over a 4-year period (2023-2026).

4.2.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

Since the adoption of the 2019 Final MND, two planning documents have been prepared identifying goals and objectives for air quality emissions. The plans, however, are not "the applicable air quality plan" as identified in "a." of the checklist above. However, for informational purposes the following analysis has been included in this Addendum. No other changes in circumstances or new information related to air quality, which was not known and could not have been known with the exercise of reasonable due diligence at the time the 2019 Final MND was adopted, have been identified during preparation of this checklist .

Maritime Clean Air Strategy

Since the 2019 Final MND, a new strategic planning document called the Maritime Clean Air Strategy (MCAS) was adopted by the Board of Port Commissioners (Board) on October 12, 2021. The MCAS identifies short-term and long-term aspirational goals and objectives intended to facilitate achievement of a clean, sustainable, and modern seaport (San Diego Unified Port District 2021). The MCAS, including its goals and objectives, is an aspirational, non-binding, strategic planning document and will be pursued through a variety of means, some of which are unknown at this time due to factors such as technological limitations and availability. As such, all of the goals and objectives are subject to feasibility and technological advances, and subject to the Board of Port Commissioner's discretion. Additionally, as the MCAS is a strategic 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. 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 does 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 aimed at achieving the MCAS goals and objectives. The MCAS explains, for instance, that it "is also anticipated 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, including specific measures, projects, and initiatives. The MCAS does not address construction of projects.

Community Emissions Reduction Plan

The Portside Community's Community Emissions Reduction Plan (CERP) was adopted by the SDAPCD on July 16, 2021, and California Air Resources Board (CARB) on October 14, 2021 (SDAPCD 2021b). It has not been adopted by the District. The CERP 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," describes a variety of actions and strategies to achieve those goals and identifies governmental and organizational entities responsible for implementation of those actions. The goals in the CERP are aspirational and are intended to guide the community businesses, organizations, and government agencies partnering in the implementation of the 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 for the community to achieve emission reductions beyond regulatory requirements. As technology evolves and data continues to be collected, the goals in the CERP may be adjusted accordingly.

4.2.3 Impact Analysis

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

The SDAB is currently designated as nonattainment with respect to the NAAQS and CAAQS for ozone, and the CAAQS for PM_{10} and $PM_{2.5}$. Air quality planning for San Diego County is under the jurisdiction of SDAPCD, which has adopted the 2020 SDAB Attainment Plan to reduce emissions of VOC and NO_x, which are both ozone precursors (SDAPCD 2022). The Attainment Plan is first submitted to CARB for approval and then to U.S. EPA as a revision to the San Diego portion of the California SIP, with the goal of ultimately achieving attainment status with respect to the NAAQS and CAAQS. The San Diego RAQS is included in the Attainment Plan and thus consistency with the RAQS is also required. The Attainment Plan relies on emissions forecasts based on demographic and economic growth projections provided by city and county general plans. Projects whose growth is included in the projections used in the formulation of the Attainment Plan are consistent with the Attainment Plan and would not interfere with its implementation. Like the Original Project, the Updated Project would involve removal, repair and improving of existing waterfront structures. Upon completion of construction activities, normal operations would resume. The Updated Project would not result in an expansion of the existing use of the site or an increase in operational capacity. Moreover, additional employees would not be needed once the Updated Project is operational. Thus, like the Original Project, the Updated Project would not include components that would induce growth or change the use of the site. Also, because the Updated Project would not modify land uses or result in an unanticipated increase in the residential population, the project would be consistent with SDAPCD's Attainment Plan and potential impacts related to a conflict with the Attainment Plan would not be any more severe than what was analyzed in the 2019 Final MND.

MCAS and CERP Analysis

As discussed in Section 4.2.2, the MCAS and the CERP propose goals to reduce air pollution from maritime cargo terminal and industrial-related operations, but are not binding documents. MCAS goals and measures are designed to be implemented if feasible and through future binding actions, by the District, but not necessarily on a project-by-project basis. In addition, although the District's participation in the CERP and

its implementation is important, most of the CERP's goals and actions, as enumerated, are not applicable to or under the control of the District to implement. For instance, a substantial component of the CERP is premised on future regulatory or policy action by the SDAPCD and/or CARB and expanding and evolving the enforcement program to increase compliance rates, increase outreach efforts, and maximize compliance (see Chapters 5 and 6 of the CERP). Nevertheless, to provide full public disclosure and informed participation, this section includes an analysis of whether the Updated Project would conflict with or obstruct implementation of the MCAS and CERP. Tables 4.2-1 and 4.2-2 discuss whether the Updated Project conflicts with or obstructs implementation of the goals and objectives of the District's MCAS and CERP to inform the public and Board regarding the Updated Project's likely near-term and long-term impacts, if any. Merely being inconsistent with a MCAS or CERP goal or objective would not necessarily be considered a significant impact under CEQA in itself; rather, the inconsistency must result in a substantial adverse effect on the environment. As documented in Tables 4.2-1 and 4.2-2, no inconsistencies have been identified that would result in a significant impact on the environment.

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
Long-Term Goals	
Long-term Goal for Trucks: In advance of the State's goals identified in Executive Order No. N-79-20, attain 100% ZE truck trips by 2030 for all trucks that call to the Ports two marine cargo terminals.	Not Applicable. The proposed Updated Project involves short-term construction and would not affect operations long-term. However, the Updated Project is not inconsistent with and does not obstruct the Port from attaining 100% ZE truck trips by 2030.
Long-term Goal for Cargo Handling Equipment: In advance of the State's goals identified in Executive Order No. N-79-20, the transition of diesel cargo handling equipment to 100% ZE by 2030.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. Nonetheless, the Updated Project is not inconsistent with and does not obstruct the Port from attaining 100% ZE diesel cargo handling equipment by 2030.
Long-term Goal for Harbor Craft: Tugboat-related Diesel Particulate Matter (DPM) emissions identified in the Port's Emissions Inventory (2019) will be reduced by half by transitioning to ZE/near zero emission (NZE) technologies and/or other lower-emitting engines or alternative fuels.	Not Applicable. The proposed Updated Project involves short-term construction and would not affect operations long-term. The Updated Project would not result in an additional number of ships being repaired at the facility. The Updated Project is not inconsistent with and does not obstruct the Port from reducing tugboat-related DPM emissions.
Long-term Goal for Port Fleet: Transition Port-owned fleet of vehicles and equipment to ZE/NZE emission technologies in manner that meets operational needs and reduces emissions, as outlined below: ▪ Transition light-, medium-, and heavy-duty vehicles beginning in 2022 to ZE. ▪ Transition emergency vehicles to alternative fuels including hybrid, electric, and/or low carbon fuels. ▪ Convert equipment, such as forklifts and lawn maintenance equipment, to ZE. ▪ Seek opportunities to advance lower emitting solutions for marine vessels	Not Applicable. The Updated Project involves short-term construction and would not affect operations. The Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. Regardless, the proposed updates to the Updated Project have do not obstruct the ability of the Port to transition its fleet of vehicles to ZE/NZE emission technologies.

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
Long-term Goal for Ocean-going Vessels: Equip marine terminals with shore power and/or an alternative technology to reduce ocean-going vessel emissions for ships that call to the Port.	Not Applicable. The Updated Project involves short-term construction and would not increase the volume of oceangoing vessels. The Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site and is not inconsistent with and does not obstruct the District from advancing implementation of shore power infrastructure and/or alternative technology to reduce ocean-going vessel emissions.
Near-Term Goals and Objectives (2021 to June 30, 2026)	
Health	
Health Goal I. Protect and improve community health by reducing emissions and lessening Portside Community residents' exposure to poor air quality.	Not Applicable. The MCAS does not address construction emissions. The Updated Project involves short-term construction and would not result in an increase of operations on the project site. The Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. While the Updated Project would result in temporary increases in emissions during the construction phases, those emissions are a less than significant impact. Emissions would not be concentrated in one area and would disperse rapidly from the site. Construction would be short-term in duration and. Once construction is complete, emissions would not increase beyond the existing conditions on site.
Health Objective 1: By October 2021, identify existing health risk levels generated from the Port's Tenth Avenue Marine Terminal and the National City Marine Terminal for Diesel Particulate Matter (DPM) and other Toxic Air Contaminant emissions. Reduce DPM Emissions: The Health Risk Assessment (HRA) may be used to inform an emission reduction goal. Reduce Health Risk: The HRA may be used to inform a cancer risk reduction goal.	Not Applicable. The MCAS does not address construction and the Updated Project would include baseline operations with no increase. Although the Updated Project is located within the Port's Tenth Avenue Marine Terminal specific plan area, emissions of DPM are estimated to occur between January 2022 and December 2024 during construction and do not result in significant air quality impacts. 2019 Final MNDAs shown in threshold (b) below, emissions from the Updated Project would not be substantially higher than the Original Project or exceed applicable significance thresholds. As such, the Updated Project would not conflict with this goal.
Health Objective 2: Assist the San Diego Air Pollution Control District and the California Air Resources Board with preparing a cumulative or community health risk analysis for the AB 617 Portside Community by providing them with the Port's Health Risk Assessment (October 2021) and other operational related information.	Not Applicable. This objective is not applicable as it regards the sharing of information between the SDAPCD and the District. Nonetheless, the Updated Project would not obstruct attainment and is not inconsistent with this objective.
Health Objective 3: Work collaboratively with the San Diego Air Pollution Control District (SDAPCD) on the SDAPCD's Portside Air Quality Improvement and Relief (also known as PAIR) program, including pursuing a	Not Applicable. This objective is not applicable as it addresses the District working collaboratively with SDAPCD. The Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
Memorandum of Agreement with the SDAPCD to contribute Port Maritime Industrial Impact Fund for the SDAPCD's purchase and installation of new portable air filtration devices at participating Portside Community residences.	on site. Nonetheless, the proposed Updated Project is not inconsistent with and would not obstruct the District's ability to pursue an MOA with the SDAPCD to purchase and install air filtration devices in participating Portside Community residences.
Health Objective 4: Collaborate with the San Diego Air Pollution Control District (SDAPCD) as they evaluate and consider developing a new rule to control emissions from indirect sources, in accordance with the timelines and dates established by the SDAPCD.	Not Applicable. The proposed Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. This objective addresses the District collaborating with SDAPCD. Regardless, the Updated Project is not inconsistent with and does not obstruct the District's ability to collaborate with the SDAPCD to develop new rules to control emissions.
Community	
Community Goal 1: Enrich the AB 617 Portside Community through Education, Engagement, and Urban Greening.	Not Applicable. The proposed Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. The goal addresses the District educating and engaging and urban greening of Portside communities. The proposed updates to the Updated Project are not inconsistent with and does not obstruct the District's ability to enrich the AB 617 Portside Community through community education, engagement, and urban greening.
Community Objective 1: Rely on established processes for stakeholders and the public to provide input in the selection, deployment, and on-going monitoring of emission reduction projects.	Not Applicable. The proposed Updated Project would not result in a change in operational emissions once the Updated Project elements are constructed. This objective involves the District establishing processes for stakeholders and the public to provide input. While this objective is not applicable to the Updated Project, it is not inconsistent with and does not obstruct the District's ability to engage with and receive input from stakeholders and the public on the issue of emission reductions.
Community Objective 2: Port staff will provide the Board of Port Commissioners, Barrio Logan Community Planning Group, the National City Council, and the AB 617 Portside Community Steering Committee with periodic updates on the status of its emission reduction projects and initiatives and associated emission reduction levels.	Not Applicable. The proposed Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. This objective involves Port staff giving periodic updates. However, the proposed Updated Project is not inconsistent with and does not obstruct the District's ability to provide status updates and/or to inform various governing and/or advisory bodies of the District's emission reduction projects.
Community Objective 3: Port staff will convene a group of stakeholders to explore increasing tree canopy in the Portside Community and continue to work with groups like Urban Corps of San Diego County to advance this objective.	Not Applicable. The proposed Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. This objective involves Port staff gathering stakeholders and increasing urban greening. The proposed Updated

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
	Project is not inconsistent with and does not obstruct the District's ability to engage stakeholders on issues of community concern such as tree canopy.
Community Objective 4: Support the expansion of the Port's existing outdoor educational programs to increase participation of youth that live in the AB 617 Portside Community.	Not Applicable. The proposed Updated Project is a construction project and this objective addresses outdoor education. Nonetheless, the Updated Project is not inconsistent with and does not obstruct the District's ability to support the expansion of existing outdoor educational programs to youth that live in the AB 617 Portside Community.
Community Objective 5: Work with Portside Community residents and stakeholders to complete a comprehensive update in 2025 to the MCAS, including goals and objectives for 2026 to 2030 that are Specific, Measurable, Attainable, Relevant, Timebound, Inclusive, and Equitable that reflects updated technology, regulations, and market conditions.	Not Applicable. The proposed Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. This objective addresses updating the MCAS. However, the proposed Updated Project is not inconsistent with and does not obstruct the District's ability to engage with residents and stakeholders to complete a comprehensive update of the District's MCAS in 2025, which would include setting goals and objectives for the 2026 to 2030 time period.
Cargo Handling Equipment	
Cargo Handling Equipment Goal 1: Attain substantial reductions for cargo handling equipment related emissions by facilitating upgrades to zero emission/near zero emission equipment alternatives.	Not Applicable. The proposed Updated Project would not result in a change in operational emissions once the Updated Project elements are constructed. Furthermore, the project site in question is used to conduct ship repair and maintenance activities and does not receive cargo. However, the proposed Updated Project would not obstruct the attainment of reductions in air pollutant emissions from cargo handling equipment and is not inconsistent with the goal.
Cargo Handling Equipment Objective 1: Reduce emissions from cargo handling equipment by approximately 90% for nitrogen oxides (NOx), 80% for diesel particulate matter (DPM), and 50% for carbon dioxide equivalent (CO2e) below 2019 levels by January 1, 2025.	Not Applicable. The proposed Updated Project would not result in a change in operational emissions once the Updated Project elements are constructed. Furthermore, the project site in question is used to conduct ship repair and maintenance activities and does not receive cargo. However, the proposed Updated Project would not obstruct the attainment of reductions in air pollutant emissions from cargo handling equipment and is not inconsistent with the objective.
Harbor Craft	
Harbor Craft Goal 1: Reduce emissions from Harbor Craft by advancing emerging zero emission and advanced technologies.	Not Applicable. The proposed Updated Project would not be inconsistent with or obstruct a future transition to advanced Harbor Craft technologies that would reduce emissions. The proposed updates to the Updated Project involve short-term construction and would not affect operations long-term. The updates to the Updated Project would not result in an additional number of ships being repaired at the facility.

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
Harbor Craft Objective 1: Facilitate implementation of the first all- electric tugboat in the United States by June 30, 2026.	Not Applicable. The Updated Project involve short-term construction and would not affect operations long-term. The proposed Updated Project would not be inconsistent with or obstruct a future implementation of the first all-electric tugboat in the United States.
Harbor Craft Objective 2: Identify suitable projects to assist with advancing the State's goals for commercial harbor craft by supporting: ▪ Existing fuel docks with the transition to renewable diesel by January 1, 2023; ▪ Installation and maintenance of landside shore power for all facilities that receive more than 50 visits per year by 2024; ▪ All new excursion vessels transition to zero emission capable hybrid technologies starting on January 1, 2025; and ▪ Short run ferry-operators transition to zero emission technologies for all new and in use short-run (under 3 nautical miles) trips starting on January 1, 2026.	Not Applicable. The proposed Updated Project does not involve the use of fueling docks. No excursion or short run ferry operations are associated with shipyard operations. The Updated Project involves short-term construction and would not affect operations long-term. The proposed Updated Project would not be inconsistent with or obstruct this objective.
Trucks	
Truck Goal 1: Improve the air quality in the Portside Community by accelerating the implementation of zero emission/near zero emission trucks.	Not applicable. The proposed Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The Updated Project does not propose additional parking and/or changes to existing operational infrastructure. The Updated Project is not inconsistent with and does not obstruct the Port from accelerating the implementation of zero emission/near zero emission trucks.
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	Not Applicable. Pursuant to Objective 1A, the District is prepared a heavy duty truck transition plan, the details of which would include provisions that would aid and further facilitate the transition to ZE truck technologies, consistent with the objective. This objective has been satisfied. Nonetheless, the proposed Updated Project did not be inconsistent with or obstruct the District's ability to prepare the truck transition plan that includes the three components that the Board directed staff to include in the heavy-duty truck transition plan.

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
ownership, delivery distances within San Diego region and beyond) needed to prepare the transition plan.	
Truck Objective 1B: By the end of 2022, Port 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.	Not Applicable. The proposed Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The Updated Project is not inconsistent with and does not obstruct the District's ability to develop a Zero Emission Truck Program by the end of 2022.
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.	Not Applicable. The proposed Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. However, it is not inconsistent with and does not obstruct the District's ability to coordinate with CARB as they continue to develop the Advanced Clean Fleet Regulation.
Truck Objective 1D: In collaboration with the California Air Resources Board, the Port will utilize a truck registry or other system to summarize annual truck trips to the Port's marine cargo terminals and measure progress to achieve Port goals.	Not Applicable. The proposed Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. Regardless, the Updated Project is not inconsistent with and does not obstruct the Port's ability to utilize a truck registry to summarize annual truck trips to the Port's marine cargo terminals.
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.	Not Applicable. The proposed Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The proposed Updated Project, however, is not inconsistent with and does not obstruct District staff from reporting to the Board of Port Commissioners.
Truck Goal 2: Facilitate the deployment of infrastructure to support the transition to zero emission truck trips to the Port's marine cargo terminals.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The Updated Project does not propose additional parking and/or changes to existing operational infrastructure. The Updated Project is not inconsistent with and does not obstruct the Port from facilitating the deployment of infrastructure to support the transition to zero emission truck trips.
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	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. Nonetheless, it is not inconsistent with and does not

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
support deployment of zero emission trucks, which may include locations in close proximity to or on the Tenth Avenue Marine Terminal and/or the National City Marine Terminal.	obstruct District staff from identifying potential locations for infrastructure to support deployment of zero emission trucks.
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.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. However, it is not inconsistent with and does not obstruct District staff from ensuring any marine terminal truck charging infrastructure is consistent with other regional efforts to deploy and install truck charging infrastructure.
Truck Goal 3: Support the designated truck route to avoid truck impacts on the local community.	Not Applicable. The proposed Updated Project involves short-term construction and would not affect truck operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The Updated Project, however, does not propose additional parking and/or changes to existing operational infrastructure.
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.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. Nonetheless, he Updated Project is not inconsistent with and does not obstruct District staff from advancing the flexible freight and transit route concept.
Fleet	
Fleet Goal 1: Update Port purchasing and/or procurement policies to acquire zero emission vehicles and best available alternative fuels or technologies.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The Updated Project is not inconsistent with and does not obstruct the Port from purchasing and/or procuring zero emission vehicles or fuel technologies.
Fleet Objective 1A: Update the Port's vehicle purchasing and/or procurement policy in Fiscal Year 2022 to identify a hierarchy of procurement considerations that prioritize zero emission vehicles, followed by the utilization of best available alternative fuels, to ensure Port fleet upgrades and replacements obtain the lowest emitting option available.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. However, the proposed Updated Project is not inconsistent with and does not obstruct District staff from updating procurement policies.
Fleet Objective 1B: Create a zero emission vehicle transition plan in Fiscal Year 2022 for the Port's fleet of vehicles and equipment that identifies a long-term acquisition schedule for when current vehicles and equipment will be phased out and when new electric vehicles and equipment are anticipated to be procured.	Not Applicable. The Updated Project is a construction project with no increase in operations and is not inconsistent with and does not obstruct District staff from developing a plan to transition the District fleet to zero emission vehicles.

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
Fleet Goal 2: Procure zero emission vehicles and necessary electric vehicle charging equipment and infrastructure beginning in Fiscal Year 2022.	Not applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project does not propose changes to existing operational infrastructure. However, the Updated Project is not inconsistent with and does not obstruct the District from procuring zero emission vehicles and charging equipment.
Fleet Objective 2A: Procure at least two battery electric medium- to heavy-duty vehicles in Fiscal Year 2022. where feasible, provided. Developments providing public recreational opportunities are preferred.	Not applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. The Updated Project does not change the existing operational infrastructure. This objective addresses the District procuring vehicles and the Updated Project is not inconsistent with and does not obstruct the District from procuring large battery-powered vehicles.
Fleet Objective 2B: Identify power needs and electric vehicle charging options at the General Services facility and apply to SDG&E's Power Your Drive for Fleets Program in calendar year 2021.	Not Applicable. This objective addresses charging options and the District's General Service facility and the Updated Project is not inconsistent with and does not obstruct District staff from identifying power needs and apply for program funding.
Shipyard	
Shipyard Goal 1: Collaborate with the San Diego Air Pollution Control District as they review and propose modifications to applicable rules, regulations, and/or programs.	Not Applicable. The proposed Updated Project is a construction project with no increase in operations. The project site is subject to numerous laws and regulations implemented by the SDAPCD and the District would be a willing collaborative participant during modification or update to existing regulations. The proposed Updated Project would not obstruct the ability of the District to collaborate with the SDAPCD on new and/or modified rules (regulations) that may be adopted by the SDAPCD. As applicable, the Updated Project may be subject to the following SDAPCD rules, and others, during construction: ▪ Rule 50—Visible Emissions: establishes limits for the opacity of emissions within the SDAPCD. The Updated Project is subject to Rule 50(d)(1) and (6) and should not exceed the visible emission limitation. ▪ Rule 51—Nuisance: prohibits emissions that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; endanger the comfort, repose, health, or safety of any such persons or the public; or cause injury or damage to business or property.

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
	▪ Rule 52—Particulate Matter: establishes limits for the discharge of any particulate matter from nonstationary sources. Rule 54—Dust and Fumes: establishes limits for the amount of dust or fume discharged into the atmosphere in any 1 hour. ▪ Rule 55—Fugitive Dust Control: sets restrictions on visible fugitive dust from construction and demolition projects. ▪ Rule 67—Architectural Coatings: establishes limits to the VOC content for coatings applied within the SDAPCD.
Shipyard Objective 1: Collaborate with the San Diego Air Pollution Control District as they evaluate and consider potentially lowering the health risk in Rule 1210, including the threshold for stationary sources that reduce their estimated cancer risk.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The Updated Project is not inconsistent with and does not obstruct implementation of this objective, which was completed in November 2021. More specifically, with input from the District, the SDAPCD updated Rule 1210 to lower the health risk threshold from 100 per one million to 10 per million on November 4, 2021.
Shipyard Objective 2: Continue to work with the shipyard facilities to identify and implement emission reduction projects and, subject to further Board approval, require such implementation, and support the shipyard-related actions that are identified in the Portside Community's AB 617 Community Emissions Reduction Program.	Not applicable. The proposed Updated Project consists of short-term construction. The Updated Project would not be inconsistent with and does not obstruct the District's ability to implement emission reductions projects in the future.
Ocean-Going Vessels	
Ocean-going Vessels In-Transit Goal 1: Reduce annual ocean-going vessel in-transit emissions.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project would not result in an additional number of ships being repaired at the facility, thus not creating an increase in transit emissions. Nonetheless, the Updated Project would not obstruct or be inconsistent with reducing annual ocean-vessel in-transit emissions.
Ocean-going Vessels In-Transit Objective 1A: Pursue implementing an expanded Vessel Speed Reduction Program that achieves upwards of 90% participation, subject to further Board of Port Commissioners' approval.	Consistent. The project involves short-term construction with no operational increases. Shipyard operations within the project site would not involve activities that would obstruct or be inconsistent with the Vessel Speed Reduction Program that is subject to further Board of Port Commissioner approval.
Ocean-going Vessels At-Berth Goal 2: Reduce ocean-going vessels' at- berth emissions by expanding existing and/or developing new shore power systems and/or equivalent technologies at the Port's marine terminals.	Consistent. When vessels berth or dock for repairs, upgrades, and maintenance, their engines are turned off. The proposed Updated Project is not inconsistent with and does not obstruct the District from advancing implementation of shore power infrastructure and/or

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
	alternative technology to reduce ocean-going vessel emissions while at berth.
Ocean-going Vessels At-Berth Objective 2A: For cruise ships, add one additional plug to the existing shore power system by 2023.	Not Applicable. The proposed Updated Project does not involve the operation of cruise ships, but would not obstruct adding one additional plug to the existing shorepower system and is not inconsistent with the same. .
Ocean-going Vessels At-Berth Objective 2B: At the National City Marine Terminal, add a new shore power system with at least two plugs and/or an alternative technology that reduces ocean-going vessel emissions at berth by 2025.	Not Applicable. The Updated Project is not located at the National City Marine Terminal but would not obstruct adding to the existing shorepower system at National City Marine Terminal and is not inconsistent with the same.
Rail	
Rail Goal 1: Upgrade rail capabilities at the Tenth Avenue Marine Terminal to allow for more efficient and cleaner operations.	Not Applicable. The Updated Project does not involve the use of rail services, but would not obstruct this goal and is not inconsistent with the same.
Rail Objective 1: Outline options to further develop rail upgrades, including rail reconfiguration within the Tenth Avenue Marine Terminal by June 30, 2026.	Not Applicable. The Updated Project does not involve the use of rail services, but would not obstruct this goal and is not inconsistent with the same.
Rail Goal 2: Promote the use of a Single Engine Tier 4 Switcher if applicable to operations at the Tenth Avenue Marine Terminal and National City Marine Terminal.	Not Applicable. The proposed Updated Project does not involve the use of rail services, but would not obstruct this goal and is not inconsistent with the same.
Rail Objective 2: Encourage tenants that rely on rail operations that move cargo to use cleaner switchers.	Not Applicable. The proposed Updated Project does not involve the use of rail services, but would not obstruct this goal and is not inconsistent with the same.
Enabling Goals	
Enabling Goal 1: Establish partnerships with stakeholders, tenants, and agencies to help increase the likelihood of implementation and project success.	Not Applicable. The proposed Updated Project is a short-term project and is not inconsistent with and do not obstruct the District's ability to establish partnerships to increase the likelihood of implementation of zero emission initiatives and/or projects.
Enabling Objective 1A: Pursue a potential Memorandum of Understanding with the San Diego Air Pollution Control District to administer California Air Resources Board Funding to help fund zero emission/ near zero emission trucks and/or cargo handling equipment.	Not Applicable. The proposed Updated Project involves short-term construction with no operational increases and is not inconsistent with and does not obstruct the District from pursuing an MOU with SDAPCD and/or CARB.
Enabling Objective 1B: Work with the California Department of Transportation and other west coast ports to implement domestic shipping services to reduce emissions by facilitating the movement of goods by waterborne routes that are currently served by trucks or rail.	Not Applicable. The proposed Updated Project does not involve domestic shipping services and is not inconsistent with and do not obstruct the District's ability to work with the California Department of Transportation to facilitate the movement of goods by waterborne routes.
Enabling Goal 2: Conduct the necessary research and analysis to inform additional options that could be	Not Applicable. The proposed Updated Project is a short-term construction project and is not inconsistent

Table 4.2-1. Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Updated Project Applicability and Consistency
used to help attain emission reductions and other MCAS-related goals.	with and does not obstruct the District's ability to conduct additional research and analysis to inform additional options that could be used to attain emission reductions and other MCAS-related goals.
Enabling Objective 2A: Create a clearinghouse process to track progress towards achieving MCAS and relevant AB 617 CERP goals and objectives, including technology and emission improvements associated with development, within 30-days of final approval of both documents.	Not Applicable. This objective is unrelated to the proposed Updated Project. However, the proposed Updated Project is not inconsistent with and does not obstruct the District from creating a clearinghouse to track and monitor MCAS-related goals and objectives.
Enabling Objective 2B: Establish an Emissions Reduction Incentive Program.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. But the proposed Updated Project is not inconsistent with and does not obstruct the District from developing an emissions reduction incentive program.
Enabling Objective 2C: Prepare a market study/feasibility analysis for the Board of Port Commissioners that explores a range of potential fees that can support zero emission/near zero emission reduction projects, as well as identify any implications the fee may have on the Port's revenue and maritime business opportunities.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. However, the Updated Project is not inconsistent with and does not obstruct the District's ability to prepare a market/feasibility study for the Board of Port Commissioners that considers a range of fees that can support zero emission/near zero emission projects.
Enabling Objective 2D: Explore potential credentials for installation and maintenance of emerging zero emission technologies and report recommendations to the Board of Port Commissioners by end of calendar year 2021.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The Updated Project is not inconsistent with and does not obstruct the District's ability to provide a report and recommendations to the Board of Port Commissioners that explores potential credentials for the installation and maintenance of emerging zero emission technologies.
Enabling Objective 2E: Promote adoption of zero emission technologies by Port tenants, truckers, and other users of equipment.	Not Applicable. The proposed Updated Project consists of short-term construction and would not affect operations. The Updated Project does not propose additional parking and/or changes to existing operational infrastructure. The Updated Project is not inconsistent with and does not obstruct the Port from accelerating the implementation of zero emission equipment.

Source: San Diego Unified Port District 2021a

Table 4.2-2. Community Emissions Reduction Program Consistency Analysis

Goals and Strategies	Updated Project Consistency
Goal 1. By 2031, reduce Diesel PM from 2018 levels by 80% in ambient air at all Portside Community locations.	Consistent. Goal 1's aspirational objectives are long-term and may be pursued through a variety of measures, including future regulatory or policy action by the SDAPCD (and other public agencies, organizations, and businesses). The proposed updates to the Updated Project would not result in an increase of operational emissions. The Updated Project would result in temporary increases in emissions during the construction phases. Emissions would not be concentrated in one area and would disperse rapidly from the site. Construction would be short-term in duration. As discussed in Question 2c and Table 4.2-3 below, emissions of NOx, VOC, PM_{10}, and $PM_{2.5}$ from the Updated Project's construction would be below the applicable thresholds. Therefore, the Updated Project would not generate emissions in quantities that would result in an exceedance of the NAAQS or CAAQS for ozone, PM10, and PM2.5. Since the Updated Project's project-related criteria pollutant emissions would be temporary and well below applicable project-level thresholds for all pollutants, the Updated Project's incremental contribution from construction emissions would result in a less than cumulatively considerable air quality impact. Once construction is complete, emissions would not increase beyond the existing conditions on site.
Goal 2. Medium and Heavy Duty trucks servicing Portside Community to be 100% ZEV 5 years ahead of the California state requirements.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The Updated Project is not inconsistent with and does not obstruct the SDAPCD or CARB from developing and implementing ZEV requirements for medium and heavy-duty trucks; until such requirements are established with a time certain implementation date, it cannot be determined if and when the Updated Project can meet as yet defined requirements.
Goal 3. Establish ZEV HD/MD truck charging infrastructure in Portside, by specified dates in Action E1, with 4 sites operational by 2026.	Not Applicable. The Updated Project consists of short-term construction and would not affect operations. The Updated Project does not propose additional parking and/or changes to existing operational infrastructure. The proposed updates to the Updated Project are not inconsistent with and do not obstruct SDAPCD staff from establishing ZEV HD/MD truck charging infrastructure.
Goal 4. Reduce emissions from HD/MD trucks servicing indirect sources by 100% 5 years in advance of regulatory requirements.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The Updated Project is not inconsistent with and does not obstruct CARB from developing and implementing emission reduction requirements for medium and heavy-duty trucks serving the Portside Community. Until such requirements

Table 4.2-2. Community Emissions Reduction Program Consistency Analysis

Goals and Strategies	Updated Project Consistency
	are established with a time certain implementation date, it cannot be determined if and when the Updated Project can meet as yet defined requirements.
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.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The proposed Updated Project is not inconsistent with and does not obstruct SDAPCD staff from presenting the cumulative cancer risk for Portside Communities from Health Risk Assessments and modeling of cumulative risk.
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 stationary and mobile sources, to meet goals of/million by 2026 and/million by 2031.	Not Applicable. The proposed Updated Project is a short-term construction project and is not inconsistent with and does not obstruct SDAPCD staff from establishing an estimated cancer risk reduction goal.
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:	Not Applicable. The proposed Updated Project does not deal with HRAs for the two terminals, but it does not obstruct SDAPCD staff from conducting an HRA.
2) By October 2021, identify existing health risk levels generated from the Port's Tenth Avenue Marine Terminal (TAMT) and the National City Marine Terminal (NCMT) for Diesel Particulate Matter (DPM) and other Toxic Air Contaminant (TAC) emissions. Reduce Health Risk: The HRA may be used to inform an aspirational goal of reducing cancer risk Reduce DPM Emissions: The HRA may be used to inform an aspirational emission reduction goal 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 Port's HRA (October 2021) and the other operational related information.	Priority 2) a. Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. However, the proposed Updated Project is not inconsistent with and does not obstruct SDAPCD staff from developing an aspirational goal to reduce cancer risk. Priority 2) b. Not Applicable. The proposed Updated Project is a short-term construction project with no operational increases. It would not be inconsistent with and does not obstruct SDAPCD staff from developing an aspirational goal to reduce emissions. Priority 2) c. Not Applicable. The proposed is not inconsistent with and do not obstruct SDAPCD staff from establishing an estimated cancer risk reduction goal. The proposed Updated Project is a short-term construction project. Priority 2) c. Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. It would not be inconsistent with and does not obstruct Port staff

Table 4.2-2. Community Emissions Reduction Program Consistency Analysis

Goals and Strategies	Updated Project Consistency
	from assisting SDAPCD and CARB in preparing a cumulative cancer risk analysis.
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 Updated Project does not include any permitted stationary sources or an increase in operations that would result in long-term cancer risk. Any portable equipment used for construction would result in temporary increases in emissions during the construction phases. Emissions would not be concentrated in one area and would disperse rapidly from the site. Construction would be short-term in duration. Once construction is complete, emissions would not increase beyond the existing conditions on site.
Goal 9. By 2031 complete Harbor Drive 2.0 truck freight improvements, including enforcement and signage of truck route for National City.	Not Applicable. The project site is not located in National City; therefore, the proposed updates to the project are not inconsistent with and do not obstruct completion of Harbor Drive 2.0 improvements.
Goal 10. By 2031 increase tree canopy in the Portside Community to 35%.	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. It would not be inconsistent with and do not obstruct the SDAPCD, City of San Diego, National City and stakeholders from increasing the tree canopy of Portside Communities. The Updated Project would not anticipated to remove any mature trees.
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 Updated Project does not include operational changes or impact parks. It is not inconsistent with and does not obstruct the SDAPCD, City of San Diego, National City and stakeholders from increasing park space for Portside Communities.
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.	Not Applicable. The proposed updates to the Updated Project would not be inconsistent with or obstruct any actions to advance the deployment of on-road electric trucks to demonstrate feasibility.
Action E3: Support dedicated truck route and avoid truck impacts to local community	Not Applicable. The proposed updates to the Updated Project involve short-term construction and would not affect truck operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. The Updated Project does not propose additional parking and/or changes to existing operational infrastructure.
Action E4: Increase number of truck parking and staging facilities with electric charging capabilities to address regional parking needs and alleviate the truck parking burdens within the Portside Community.	Not Applicable. The updates to the Updated Project would not result in any changes in available parking and would not increase operational truck trips.

Table 4.2-2. Community Emissions Reduction Program Consistency Analysis

Goals and Strategies	Updated Project Consistency
Land Use Strategies	
Action F3: Urban Greening	Not Applicable. The proposed updates to the Updated Project involve short-term construction and would not affect truck operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves, piers and a quay wall on site. The proposed updates to the Updated Project are not inconsistent with and do not obstruct City of National City, City of San Diego, SANDAG, U.S. Navy, Port of San Diego, Caltrans or the Barrio Logan Community Planning Group from promoting programs, projects, and funding opportunities to increase urban greening efforts.
Action F5: Support Harbor Drive Multimodal Corridor Study (HDMCS) Land Use Proposals	Not Applicable. This Action addresses HDMCS and the project is a short-term project. The proposed Updated Project is not inconsistent with and does not obstruct the City of San Diego, Port of San Diego or the City of National City from supporting the Harbor Drive Multimodal Corridor Study Land Use Proposals.
Action F7: Improve Transportation Efficiencies	Not Applicable. The Updated Project involves short-term construction and would not affect operations long-term. The Updated Project consists of repairing and replacing deteriorated wharves and piers on site. The proposed Updated Project is not inconsistent with and does not obstruct SDAPCD, SANDAG, Naval Base San Diego, Port of San Diego, City of San Diego, City of National City, and Caltrans from working with regional and local transportation agencies to improve transportation efficiencies.
Working Waterfront Activities (Port, Navy, and Shipyards)	
Action G2: Reduce Emissions from Ships at Berth	Consistent. When vessels berth or dock for repairs, upgrades, and maintenance, their engines are turned off. The Updated Project would not cause any increase in operational emissions. The proposed Updated Project are not inconsistent with and does not obstruct the Port from advancing implementation of shore power infrastructure and/or alternative technology to reduce ocean-going vessel emissions.
Action G3: Reduce emissions from harbor craft	Consistent. The proposed Updated Project would not cause any increase in operational emissions. Although there would be use of harbor craft during construction, these emissions would not be long-term. The Updated Project would not obstruct or conflict with the port's ability to reduce emissions from harbor craft long-term.
Action G4: Reduce DPM and NOx emissions from portable air compressors and other diesel sources at shipyards.	Consistent. The proposed Updated Project would not cause any increase in operational emissions, and does not involve portable air compressors or other stationary diesel sources.

Table 4.2-2. Community Emissions Reduction Program Consistency Analysis

Goals and Strategies	Updated Project Consistency
Action G5: Promote best practices for reducing diesel, VOC and other emissions from ship repair activities.	Consistent. The Updated Project would result in temporary increases in emissions during the construction phases. Emissions would not be concentrated in one area and would disperse rapidly from the site. Construction would be short-term in duration. Once construction is complete, emissions would not increase beyond the existing conditions on site.
Action G6: Reduce emissions from shipyard employee transportation	Consistent. The Updated Project would result in temporary increases in emissions during the construction phases. Emissions would not be concentrated in one area and would disperse rapidly from the site. Construction would be short-term in duration. Once construction is complete, emissions would not increase beyond the existing conditions on site.
Action G7: Promote adoption of ZE technologies by Port tenants, truckers, and other users of equipment	Not Applicable. The proposed updates to the Updated Project consist of short-term construction and would not affect operations. The Updated Project does not propose additional parking and/or changes to existing operational infrastructure. The proposed updates to the Updated Project are not inconsistent with and do not obstruct SDAPCD staff from promoting adoption of ZE technologies.
Advocacy Measures	
Action H1: Support Emission Reduction Opportunities Some measures require a commitment by an agency that cannot be made until after a public process and/or after May 2021 when the CERP will be finalized. The only action the APCD and/or Steering Committee can take is to support an outcome that will improve air quality in Portside, all disadvantaged communities, or the region.	Consistent. The proposed updates to the Updated Project would not be inconsistent with or obstruct the District's ability to support emission reduction opportunities intended to improve air quality.

Source: SDAPCD 2021b

While the MCAS and CERP were not adopted at the time of the Final 2019 Final MND and are both non-binding documents. However, the Updated Project would not obstruct the implementation of the two documents and is not inconsistent with the same. The Updated Project would not have one or more significant air quality effects, nor would it cause substantially more severe significant air quality impacts, there are no mitigation measures that were previously infeasible that are now feasible and there are no mitigation measures that are considerably different than those in the 2019 Final EIR that would reduce one or more significant impacts that the Applicant is declining to adopt. There for the consistency analysis with the MCAS and CERP, which are provided for informational purposes, does not trigger a supplemental or subsequent MND.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Emissions of CO, sulfur dioxide (SO_x) PM_{10}, $PM_{2.5}$ and the ozone precursors volatile organic compounds (VOCs) and NO_x associated with Updated Project's construction equipment, haul trucks, and worker vehicles were calculated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 (South Coast Air Quality Management District [SCAQMD] 2020). The estimated daily construction emissions are shown in Table 4.2-3, Estimated Maximum Daily Construction Criteria Air Pollutant Emissions, and the complete model outputs are included as Appendix A. As shown in Table 4.2-3, emissions would continue to be less than the SDAPCD thresholds; therefore, there would be no new or more severe impacts from the Updated Project than what was analyzed in the 2019 Final MND.

Table 4.2-3. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
2019 Final MND						
2019	0.95	14.53	8.23	0.01	0.57	0.51
2020	0.90	13.73	8.05	0.02	0.54	0.47
2021	0.83	12.64	7.89	0.02	0.46	0.40
2022	0.76	10.28	7.79	0.02	0.46	0.40
2023	0.73	10.57	7.68	0.02	0.43	0.38
Maximum	*0.95*	*14.53*	*8.23*	*0.02*	*0.57*	*0.51*
Updated Project						
2022	0.77	11.28	7.91	0.02	0.50	0.41
2023	0.86	11.20	11.41	0.02	0.55	0.46
2024	0.81	10.72	9.37	0.01	0.51	0.43
2025	0.78	10.23	9.31	0.01	0.49	0.40
2026	0.69	9.82	7.69	0.02	0.45	0.37
Maximum	*0.86*	*11.28*	*11.41*	*0.02*	*0.55*	*0.46*
Net Change (Update Project minus 2019 Final MND)	(0.09)	(3.25)	(3.18)	0.00	(0.02)	(0.05)
Screening Thresholds	*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.
Parentheses () reflect the Updated Project emitting less than the 2019 Final MND
See Attachment A for complete results.

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

As in 2019, the SDAB is classified as an attainment area for all criteria air pollutants except ozone, PM_{10}, and $PM_{2.5}$. As shown in Table 4.2-3, emissions of NO_x, VOC, PM_{10}, and $PM_{2.5}$ from the Updated Project's construction would be below the applicable thresholds. Therefore, the Updated Project would not generate

emissions in quantities that would result in an exceedance of the NAAQS or CAAQS for ozone, PM10, and PM2.5. Since the Updated Project's project-related criteria pollutant emissions would be temporary and well below applicable project-level thresholds for all pollutants and the project would not conflict with the RAQS, the Updated Project's incremental contribution from construction emissions would result in a less than cumulatively considerable air quality impact. Thus, the Updated Projects cumulative impacts would not be new or more severe than those analyzed for the Original Project in the 2019 Final MND.

In addition, once construction of the Updated Project is complete, existing operations would resume and would not result in an increase in emissions above existing levels. Therefore, operational emissions would not be cumulatively considerable, and cumulative impacts would not be new or more severe than those analyzed for the Original Project in the 2019 Final MND.

d) Expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors typically consist of schools, parks, hospitals, resident care facilities, day-care centers, or other facilities that may house individuals with health conditions that would be adversely affected by changes in air quality. The nearest sensitive receptor to the Updated Project site continues to be the Cesar Chavez Park, located near the northwestern boundary of the project site. At its nearest point, construction of the Updated Project would occur approximately 100 feet from the park. Criteria pollutants can be linked to health effects and specific adverse health effects to individuals or population groups induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals [e.g., age, gender]). Criteria pollutant precursors (VOC and NO_x) affect air quality on a regional scale, typically after significant delay and distance from the pollutant source emissions. Health effects related to ozone and NO_2 are, therefore, the product of emissions generated by numerous sources throughout a region. As such, specific health effects from these criteria pollutant emissions cannot be directly correlated to the incremental contribution from a single project. Further, because the Updated Project would generate criteria pollutant emissions that would be temporary and well below established significance thresholds, it would not expose sensitive receptors to substantial criteria pollutant concentrations.

Two other primary emissions of concern regarding health effects to sensitive receptors from land development projects are CO and toxic air contaminants (TACs), which are discussed below.

CO Hot Spots

A CO hot spot is an area of localized pollution caused by severe vehicle congestion on major roadways, typically near intersections. Similar to the Original Project, the Updated Project's project-related traffic would be limited (2 haul truck trips per week on average during construction), it is not anticipated that the project would result in substantial roadway congestion or intersection delays. Therefore, the potential for a CO hot spot or exposure of sensitive receptors to substantial, project-generated, local CO emissions is low, and impacts would not be new or more severe than those analyzed for the Original Project in the 2019 Final MND.

Exposure to TACs

Construction activities from the Updated Project would result in short-term project-generated emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment. CARB identified diesel PM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Therefore, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risks assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for residents and a 25-year exposure period for workers (OEHHA 2015). Because the Updated Project's construction would occur over two phases over a four-year period, and because the types of construction equipment would be limited to tugboats, cranes, and impact/vibratory hammer, emissions of diesel PM would be temporary and short-term and would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Impacts would not be new or more severe than those analyzed for the Original Project in the 2019 Final MND.

e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Like the Original Project, the Updated Project's diesel exhaust from construction may create noticeable odors near the construction activities; however, the diesel exhaust odors would be temporary and minor. In addition, the use of diesel is common in the surrounding industrial areas and in the Bay from the use of diesel-powered vessels. Operation of the Updated Project would not include heavy industrial or agricultural uses that are typically associated with objectionable odors. Therefore, the Updated Project would not create objectionable odors that would affect a substantial number of people, and odor impacts would not be more severe than those analyzed for the Original Project in the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

There are no mitigation measures or specific conditions from the 2019 Final MND identified to reduce impacts related to air quality emissions.

4.3 Biological Resources

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
III. BIOLOGICAL RESOURCES			
Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in	No	No	No

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
III. BIOLOGICAL RESOURCES			
local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?			
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	No	No	No
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No	No	No
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No	No	No
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No	No	No
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project, as they relate to biological resources; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted, as they relate to biological resources.

4.3.1 Summary of 2019 Final MND

The 2019 Final MND identified potentially significant impacts to multiple sensitive species with the potential to occur on or near the project site. These sensitive species included the pacific green sea turtle (*Chelonia mydas*), harbor seal (*Phoca vitulina)*, California sea lion (*Zalophus californianus*), common dolphin (*Delphinus* spp.), bottlenose dolphin (*Tursiops truncates*), northern anchovy (*Engraulis mordax*), pacific sardine (*Sardinops sagax*), pacific mackerel (*Scomber japonicus*), jack mackerel (*Trachurus symmetricus*), California scorpionfish (*Scorpaena guttata*), English sole (*Parophrys vetulus*), California least tern (*Sternula antillarum browni*), and California brown pelican (*Pelecanus occidentalis*). Due to the presence of eelgrass within the project site, sensitive species could potentially be present during construction activities. Sensitive marine mammal species that were not likely to occur within the project site but still had the potential to, and thus could be impacted by construction activities. Sensitive fish species in the vicinity of the project site could be indirectly impacted by noise generated by construction activities. Construction activities could increase sediments in the water column which would reduce visibility and impair foraging capabilities of the terns and pelicans, thus indirectly impacting sensitive bird species.

The 2019 Final MND included mitigation measures BIO-1, BIO-2, BIO-3, and BIO-4. Mitigation measure BIO-1 required construction monitoring for sensitive species prior to the commencement of in-water construction activities and included distances for shutdown zones and monitor procedures. Mitigation measure BIO-1 would reduce impacts to sensitive reptile species, marine mammal species, and sensitive bird species. Mitigation measure BIO-2 would require the contractor to commence pile driving with a soft-start sequence to provide a warning to give individuals a chance to leave the area prior to the hammer operating at full power. Mitigation measure BIO-2 would reduce impacts to sensitive reptile species, sensitive fish species, and marine mammal species. Mitigation measure BIO-3 would require the deployment of a silt curtain around the pile-removal and pile-driving areas to prevent the spread of surface visible turbidity plume in the water area surrounding the project site. Mitigation measure BIO-3 would reduce impacts to sensitive bird species.

The Original Project would have a significant impact to a sensitive natural community and a federally protected wetland, specifically eelgrass located within the marine portion of the project site. These impacts would be reduced to a level below significance with implementation of Mitigation measure BIO-4, which required a qualified marine biologist monitor to develop an eelgrass mitigation plan prior to commencement of in-water activities.

Indirect impacts associated with foraging behavior modifications from increased water turbidity during pile improvement and pile-driving construction activities could occur to the above mentioned special-status species and could impact wildlife movement. However, mitigation measure BIO-3 would minimize turbidity in the water and allow for continued least tern foraging. In addition, construction of the Original Project would occur during daytime hours (7:00 AM to 4:00 PM) and would not require lighting; the Original Project would also not result in the addition of permanent operational lighting.

The 2019 Final MND found that there are no tree preservation policies or ordinances in effect for the project site. Likewise, there are no adopted Habitat Conservation Plans (HCPs), Natural Community Conservation Plans (NCCPs), or other approved local, regional, or state HCPs in place that would affect the project site or surrounding areas. However, the San Diego Bay Integrated Natural Resources Management Plan (INRMP) is relevant to the Original Project and the Original Project would comply with the INRMP. State level plans relevant to the project would remain consistent with those plan policies with implementation of mitigation measures BIO-2 and BIO-3. Lastly, as identified in the 2019 Final MND, six species of fish identified in the project area are managed by the National

Marine Fisheries Service (NMFS) under the Coastal Pelagics Fisheries Management Plan (FMP) and Pacific Coast Groundfish FMP. These plans identify EFH for each of the species covered by the plan. While the project site is located in an area identified as Essential Fish Habitat (EFH) for both plans, mitigation measures BIO-2 and BIO-3 would also reduce direct and indirect impacts to fish species protected under both FMPs to a less-than-significant level.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. The Updated Project would be located on the same 27.3-acre site as the Original Project and would include removal of and improvement to a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall. Because the Updated Project would occur within the same development footprint as the Original Project, these changes to the Original Project would not result in development in areas that were not analyzed for biological resources under the 2019 Final MND.

4.3.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

No changes in circumstances related to biological resources have been identified since the 2019 Final MND was certified. Updated database searches of regionally occurring special-status species maintained by the California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS) were conducted. The database searches consisted of reviewing the CDFW's California Natural Diversity Database (CNDDB) (CNDDB 2022) and the CNPS inventory (CNPS 2022) records of previously documented occurrences of special-status species in the project vicinity. The database search was conducted primarily for the purpose of identifying any special-status species with the potential to occur in the project site or immediate vicinity that would not have been evaluated in the 2019 Final MND due to a variety of reasons (including any recent changes in the listing status of a species, or a newly reported occurrence of a special-status species in the project site or vicinity). The same special-status wildlife species as identified in the 2019 Final MND have the potential to occur in the project site or project vicinity. These sensitive species included the pacific green sea turtle (*Chelonia mydas*), harbor seal (*Phoca vitulina*), California sea lion (*Zalophus californianus*), common dolphin (*Delphinus* spp.), bottlenose dolphin (*Tursiops truncates*), northern anchovy (*Engraulis mordax*), pacific sardine (*Sardinops sagax*), pacific mackerel (*Scomber japonicus*), jack mackerel (*Trachurus symmetricus*), California scorpionfish (*Scorpaena guttata*), English sole (*Parophrys vetulus*), California least tern (*Sternula antillarum browni*), and California brown pelican (*Pelecanus occidentalis*).

No changes in circumstances or other new information, which was not known and could not have been known with the exercise of reasonable due diligence related to biological resources have been identified during the preparation of this checklist.

4.3.3 Impact Analysis

Would the project:

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

Per the 2019 Final MND, the terrestrial portion of the project site is completely developed and urbanized and does not contain natural habitat that could support sensitive species. However, the marine portion of the project site has the potential to support, sensitive, protected, rare, threatened, or endangered species that occur in the region, which are listed above. The Updated Project would involve removal and improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall. These Updated Project components would be located on the same 27.3-acre site as the Original Project. Therefore, the same potential impacts to the following sensitive species would still occur: the pacific green sea turtle (*Chelonia mydas*), harbor seal (*Phoca vitulina)*, California sea lion (*Zalophus californianus*), common dolphin (*Delphinus* spp.), bottlenose dolphin (*Tursiops truncates*), northern anchovy (*Engraulis mordax*), pacific sardine (*Sardinops sagax*), pacific mackerel (*Scomber japonicus*), jack mackerel (*Trachurus symmetricus*), California scorpionfish (*Scorpaena guttata*), English sole (*Parophrys vetulus*), California least tern (*Sternula antillarum browni*), and California brown pelican (*Pelecanus occidentalis*). Mitigation measures BIO-1 through BIO-4, outlined below, would still be required for the Updated Project and would reduce impacts to sensitive species to less than significant. Therefore, the Updated Project would not result in new or more severe significant impacts related to candidate, sensitive, or special-status species.

b) ***Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?***

Impacts from Shading on Foraging Habitat

The 2019 Final MND outlined that the Original Project's installation and use of overwater structures could result in temporary and permanent reduction of potential open water eelgrass foraging habitat for California least tern and other sensitive fish-foraging species. Direct impacts to eelgrass from the Original Project would have occurred from the reconfiguration of Wharves 2 and 8 and associated shading. The overwater coverage associated with these project components would have increased shading of the eelgrass, which would have led to lower eelgrass productivity. The impacts to California least tern foraging habitat resulting from overwater coverage of eelgrass were considered potentially significant in the 2019 Final MND, and the implementation of mitigation measure BIO-4 (preparation of an Eelgrass Mitigation and Monitoring Plan prior to commencement of in-water activities) was required to lessen impacts to a level below significance.

The Updated Project would involve removal and improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall. Therefore, additional overwater coverage from reconfiguration of Wharves 2 and 8 would not occur. The replacement of Pier 4 and Wharf 4 would result in the addition of 9,525 sf of over-water coverage (i.e., shading). However, the removal of Piers 1, 5, and 7 would result in a reduction in shading of 20,328 sf. After the project construction is completed,

there would be a net reduction in shading of 4,599 sf in the project footprint. Thus, as shown in Table 2-2, the Updated Project would result in a 10,803 square foot reduction of overwater coverage as compared to the Original Project. Nonetheless, impacts to eelgrass associated with overwater coverage would still occur under the Updated Project. Based on preliminary eelgrass surveys conducted by MTS in the vicinity of Pier 4 in March and October 2021, an estimated 51 square meters of eelgrass habitat would be impacted by shading from the new expanded Pier 4 structure. Similar to the Original Project, these impacts would be reduced to a level below significance with implementation of mitigation measure BIO-4. Thus, with the implementation of mitigation measure BIO-4, the Updated Project would not result in any new or more severe significant impacts related to sensitive natural communities, including eelgrass habitat, than what was analyzed for the Original Project in the 2019 Final MND.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The terrestrial potion of the Updated Project is completely developed and does not contain any natural habitat, including state or federally protected wetlands. The project site contains a portion of San Diego Bay, which would be considered a water of the United States.

The Updated Project's implementation would not result in changes in operational activities.; thus, project operation would not result in increased adverse effects on waters of the United States relative to existing conditions.

Construction of the in-water project elements of the Updated Project could result in short-term water quality impacts from the disturbance of sediments within the project site. San Diego Bay is also a navigable water and regulated by USACE under Section 10 of the Rivers and Harbors Act.

To address the potential for impacts on waters of the United States and navigable waters, HII would be required to obtain authorization from USACE pursuant to the Section 10 process and potentially Section 404 for fill associated with additional pilings, each also requiring a CWA Section 401 water quality certification. No other modifications to state of federally protected wetlands would occur. As such, the Updated Project would not result in any new or more severe significant and adverse impacts on state or federally protected wetlands than what was analyzed for the Original Project in the 2019 Final MND.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

As discussed above and in the 2019 Final MND, indirect impacts associated with foraging behavior modifications from increased water turbidity during pile replacement and pile-driving construction activities could occur to the above mentioned special-status species and could impact wildlife movement. However, mitigation measure BIO-3 would minimize turbidity in the water and allow for continued least tern foraging. The Updated Project would involve removal and improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall. These changes in the Original Project would result in similar impacts to the movement of native resident or migratory fish and wildlife species because development would occur within the same project site analyzed in the 2019 Final MND. Therefore, under the Updated Project, MM-BIO-3 would still be required.

In addition, construction of the Original Project would occur during daytime hours (7:00 AM to 4:00 PM) and would not require lighting; the Original Project would also not result in the additional of permanent operational lighting. Therefore, the Original Project would not result in impacts to the wildlife movement or mitigatory patterns from lighting effects. Similar to the Original Project, construction activities associated with the Updated Project would still occur during the daytime hours (7:00 AM to 4:00 PM) and would not require lighting and the project would not introduce new permanent operational lighting that could impact wildlife movement or migratory patterns from lighting effects. Thus, with implementation of MM-BIO-3, impacts the Updated Project would be less than significant. The Updated Project would not result in any new or more severe significant impacts related to movement of any native resident or migratory fish or wildlife species.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As discussed above and in the 2019 Final MND, there are no tree preservation policies or ordinances in effect for the project site. As discussed in the 2019 Final MND, the PMP provides for the protection of biological resources and states that the District will remain sensitive to the needs of and cooperate with communities and other agencies in both bay and tideland development. As discussed above, impacts to biological resources from the construction and operation of the Updated Project would be reduced to less than significant with mitigation. Therefore, the Updated Project would be consistent with PMP policies pertaining to biological resources. The Updated Project would not result in any new or more severe significant impacts related to conflicts with any local policies or ordinances protecting biological resources.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The INRMP applies to the project site and was prepared to guide planning, management, conservation, restoration, and enhancement of the Bay ecosystem. The Original Project would be consistent with the INRMP. The Updated Project would involve removal and improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall within the same development footprint as the Original Project. As discussed above, the Updated Project would implement mitigation outlined in the 2019 Final MND in order to reduce potential impacts to biological resources to less than significant. Lastly, six species of fish identified in the project area are managed by NMFS under the Coastal Pelagics FMP and Pacific Coast Groundfish FMP. While the project site is located in an area identified as EFH for both plans, mitigation measures BIO-2 and BIO-3 would also reduce direct and indirect impacts to fish species protected under both FMPs to a less-than-significant level. Since the Updated Project would be located within the same project site as the Original Project and would result in similar activities, no additional impacts to existing FMPs and EFHs would occur. Therefore, with implementation of mitigation, the Updated Project would result in less than significant impacts. The Updated Project would not result in any new or more severe significant impacts related to conflicts with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Applicable Mitigation Measures from the 2019 Final MND

The applicable mitigation measures from the 2019 Final MND are presented below and are applicable to the Updated Project.

MM-BIO-1 Construction Monitoring for Sensitive Species. Prior to the commencement of in-water construction activities, the Project Applicant shall retain a qualified biological monitor that shall be approved by the District. The Project Applicant shall also obtain a Letter of Authorization from the National Oceanic and Atmospheric Administration to cover incidental harassment of marine mammals prior to the commencement of in-water construction activities. The monitor shall observe for presence of sensitive marine species including sea turtles, marine mammals, and California least terns. The monitor shall observe the site for 15 minutes prior to the start of pile driving. If sensitive species are within the shutdown zone, as defined for each species below, prior to the start of pile driving, the monitor shall delay pile driving until the monitor no longer observes the species in the shutdown zone. If a sensitive species enters the shutdown zone during active pile driving, the biological monitor shall stop pile driving until the monitor no longer observes the species in the shutdown zone.

- During pile driving of steel piles, dolphins and sea lions shall have a 25-meter shutdown zone. Seals shall have a 300-meter shutdown zone. The 300-meter shutdown zone shall apply to green sea turtles and the 25-meter shutdown zone shall apply to California least terns. Work stoppage for any species is subject to the discretion of the biological monitor who shall have the authority to stop work at any time due to observed animal behavior or uncertainty with regards to potential to harm an animal due to pile driving activities or noise generated from the activity.
- During pile driving of concrete piles, dolphins and sea lions shall have a 20-meter shutdown zone. Seals shall have a 60-meter shutdown zone. The 60-meter shutdown zone shall apply to green sea turtles and the 20-meter shutdown zone shall apply to California least terns. Work stoppage for any species is subject to the discretion of the biological monitor who shall have the authority to stop work at any time due to observed animal behavior or uncertainty with regards to potential to harm an animal due to pile driving activities or noise generated from the activity.
- Marine mammals shall be monitored within 300 meters of the activities and observation recorded by the biological monitor. Incidental Level B Harassment shall be noted for any animal in water within 215 meters of pile driving of steel piles and within 117 meters for pile driving of concrete piles.
- The biological monitor shall provide monthly reports to the District during pile driving operations.

MM-BIO-2 Soft-Start Sequencing. Prior to the commencement of construction activities, the Project Applicant shall require its contractor to commence pile driving with a soft-start sequence prior to typical pile driving activities. Soft-start provides a warning and/or gives individuals a chance to leave the area prior to the hammer operating at full power. The soft-start procedure shall require contractors to activate the impact hammer with an initial set of three strikes at 40% or less energy, separated by three 30-second waiting periods. If at any point pile driving stops for greater than one hour, then the soft- start procedure shall be conducted prior to the start of further pile driving activities. This requirement shall be indicated on construction documents to the satisfaction of the District.

MM-BIO-3 Silt Curtain and Pile Removal to Minimize Turbidity. The Project Applicant shall require and ensure deployment of a silt curtain around the pile-removal and pile-driving areas to restrict the surface visible turbidity plume to the area of removal and driving. The curtain shall consist of a hanging weighted curtain with a surface float line and shall extend from the surface to 15 feet down into the water column. The curtain shall be present for the duration of the pile-removal or pile-driving activity and shall not be removed if any visible plume is present. In addition to employing a silt curtain, the Project Applicant shall remove and install piles in a manner that minimizes sediment disturbance and turbidity in the water column.

MM-BIO-4 Eelgrass Mitigation and Monitoring Plan. Prior to the start of any in-water construction, the Project Applicant shall retain a qualified marine biologist to develop an eelgrass mitigation plan in compliance with the California Eelgrass Mitigation Policy (NOAA 2014; Appendix C). The mitigation plan shall be submitted to the District, NMFS, and other interested regulatory and/or resource agencies for approval and shall be implemented to compensate for losses to eelgrass in the event that the surveys described below indicate the project has impacts on eelgrass. The specific eelgrass mitigation and monitoring plan elements shall include:

- Prior to the commencement of any in-water construction activities, a qualified marine biologist retained by the Project Applicant and approved by the District shall conduct a preconstruction eelgrass survey. Surveys for eelgrass shall be conducted during the active eelgrass growing season (March–October), and results will be valid for 60 days, unless completed in September or October. If completed in September or October, results will be valid until March (the resumption of the next growing season). The qualified marine biologist shall submit the results of the pre- construction survey to the District and resource agencies within 30 days.
- Within 30 days of completion of in-water construction activities, a qualified marine biologist retained by the Project Applicant and approved by the District shall conduct a post construction eelgrass survey during the active eelgrass growing season. The postconstruction survey shall evaluate potential eelgrass impacts associated with construction. Upon completion of the post-construction survey, the qualified marine biologist shall submit the survey report to the District and resource agencies within 30 days.
- At least two years of annual post-construction eelgrass surveys shall be conducted during the active eelgrass growing season. The additional annual surveys shall evaluate the potential for operational impacts on eelgrass. Specifically, the surveys shall be designed to evaluate potential shading impacts noted in the project's Marine Biological Resources Report (Appendix B of the 2019 Final MND).
- In the event that impacts on eelgrass are detected, the Project Applicant shall implement the following:
  - A qualified marine biologist retained by the Project Applicant and approved by the District shall develop a mitigation plan for in-kind mitigation. The qualified marine biologist shall submit the mitigation plan to the District and resource agencies within 60 days following the post-construction survey.
  - The eelgrass mitigation and monitoring plan shall specify that the contractor/entity harvesting eelgrass to implement the required mitigation would need to obtain a Scientific Collecting Permit (SCP) for eelgrass harvest and a letter of authorization (LOA) at least 30-60 days prior to implementation.

- Mitigation for eelgrass impacts shall be at a ratio of no less than 1.2:1, as required by the CEMP, at the proposed mitigation areas within the project site, as identified in the project's Marine Biological Resources Report (Appendix B of the 2019 Final MND).
- Mitigation shall commence within 135 days of any noted impacts on eelgrass, such that mitigation commences within the same eelgrass growing season that impacts occur.
- Upon completing mitigation, the qualified biologist shall conduct mitigation performance monitoring at performance milestones of 0, 12, 24, 36, 48, and 60 months.
- The qualified biologist shall conduct all mitigation monitoring during the active eelgrass growing season and shall avoid the low growth season (November–February). Performance standards shall be in accordance with those prescribed in the California Eelgrass Mitigation Policy (Appendix C of the 2019 Final MND).

▪ The qualified biologist shall submit the monitoring reports and spatial data to the District and resource agencies within 30 days after the completion of each monitoring period. The monitoring reports shall include all of the specific requirements identified in the California Eelgrass Mitigation Policy (Appendix C of the 2019 Final MND).

4.4 Cultural Resources

Environmental Issue Area	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
IV. CULTURAL RESOURCES			
Would the project:			
a) Create a substantial adverse change in the significance of a historical resource as defined in §15064.5?	No	No	No
b) Cause a substantial adverse change in the significance of an archaeological resources pursuant to §15064.5?	No	No	No
c) Disturb any human remain, including those interred outside of formal cemeteries?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project, as they relate to cultural resources; and a summary of changes in circumstances or new information which were not known and could not have been known at the time the 2019 Final MND was adopted, as it relates to cultural resources.

4.4.1 Summary of 2019 Final MND

Per the 2019 Final MND, the project site as it has been previously dredged and disturbed, and it is unlikely to have any archeological, unique paleontological resources, unique geological feature, or known human remains or burial sites. The 2019 Final MND conducted a records search for the project site from the South Coastal Information Center (SCIC) on November 7, 2018. The 2019 Final MND found that none of the piers or wharves on the project site have been previously documented as a cultural resource or identified as a historical resource. No mitigation measures or specific conditions were required under the 2019 Final MND.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. There are no changes to the Updated Project that relate to cultural resources are proposed.

4.4.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

There are no changes in circumstances or new information regarding cultural resources.

4.4.3 Impact Analysis

Would the project:

a) Cause a substantial adverse change in the significance of a historical resources pursuant to Section 15064.5?

As discussed above, the 2019 Final MND included a records search that was conducted for the project site at the SCIC on November 7, 2018, by HELIX archaeologist Stacie Wilson. The records search area included the project site and a quarter-mile buffer. The results indicated that 13 previous studies had been conducted within the search area, none of which specifically covered the project location. Additionally, the MND found that none of the piers or wharves had been previously documented as a cultural resource or identified as a historical resource. Generally, historical resources are those resources considered eligible for listing in the California Register of Historical Resource (CRHR), listed in the National Register of Historic Places (NRHP) or in a "local register of historical resources" or identified as significant in a historical resource survey; or if the lead agency (e.g., the District) considers the resource to be historically significant.

Pier 4 and the piers slated for removal in the Updated Project are not the first or only piers in the Bay and are utilized for the general repair and maintenance of military and other seagoing vessels. The construction of the piers was not associated with major patterns in San Diego's development, such as military efforts tied to the World Wars and do not represent a significant contribution to the broad patterns of the local, regional, or national history. Pier 4 and the piers slated for demolition have no known significant association with the lives of persons important to local, California, or national history. Pier 4 and the piers slated for demolition are also typical industrial/commercial structures made of wood, steel, and concrete and do not embody the distinctive characteristics of a type, period, or method of construction, nor do they represent the work of a master, or possess artistic value. The piers and wharves impacted by the Updated Project do not contain further potential to contribute important information about human history. In addition, for a property to qualify for the NRHP or

CRHR it must retain historic integrity of those features necessary to convey its significance. The piers and associated wharves impacted by the Updated Project have been maintained on a regular basis and have been reconfigured and/or reconstructed within the last 30 years Piers 1, 5 and 7 have been destroyed by the elements, have had portions of the pier previously demolished, or are in such poor condition they are safety hazards. As such, these piers and wharves are not a significant resource under CEQA. Therefore, the Updated Project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines and there would be no new or more severe impacts to historical resources than what was analyzed for Original Project in the 2019 Final MND.

b) Cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5?

The pile removal/replacement process within the Updated Project would involve ground-disturbing activities within the Bay. The project-site portion of the Bay has been previously dredged and disturbed during installation of the existing piles and past activities at the project site. As such, it is not anticipated that archaeological resources are present where the project would involve ground-disturbing activities, The new piles would be installed in the same locations as the existing piles and there would be fewer piles driven than proposed in the Original Project. The Updated Project would, therefore, not cause any new or more adverse changes in the significance of an archaeological resource than the Original Project that was analyzed in the 2019 Final MND.

c) Disturb any human remains, including those interred outside of formal cemeteries?

As noted above, the Updated Project would occur in a substantially disturbed area of the Bay that does not contain known human remains or burial sites. Therefore, the Updated Project would not disturb human remains, including those interred outside of formal cemeteries. Thus, the Updated Project would not cause any new or more severe impacts to human remains than what was studied for the Original Project in the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

There are no mitigation measures or specific conditions from the 2019 Final MND identified to reduce impacts related to cultural resources.

4.5 Geology and Soils

Environmental Issue Area	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
V. GEOLOGY AND SOILS			
Would the project:			
a) Directly or indirectly cause potential substantial adverse effects, including the risk or loss, injury, or death involving:	No	No	No
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	No	No	No
ii. Strong seismic ground shaking?	No	No	No
iii. Seismic-related ground failure, including liquefaction?	No	No	No
iv. Landslides?	No	No	No
b) Result in substantial soil erosion or the loss of topsoil?	No	No	No
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	No	No	No
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	No	No	No
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	No	No	No
f) Directly or indirectly destroy a unique paleontological resource or site of unique geologic feature?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project as they relate to geology and soils; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted, as it relates to geology and soils.

4.5.1 Summary of 2019 Final MND

The 2019 Final MND identified no significant impacts on geology and soils from the Original Project, and no mitigation measures or specific conditions were required. Although the project site is located in a seismically active region of southern California, the 2019 Final MND found that the Original Project design and construction would have complied with the applicable regulations and standards and thus would not have been subject to significant adverse effects due to strong seismic ground shaking or liquefaction. The project site is not located near any identified landslide areas, or on expansive soils. Due to the developed and urban nature of the existing project site, the 2019 Final MND found that there is little risk of soil erosion or loss of topsoil. The Original Project also would not have required the use of septic tanks. Lastly, potential impacts to paleontological resources associated with the Original Project were analyzed in the Cultural Resources section of the 2019 Final MND. As discussed in that section, because the project site as it has been previously dredged and disturbed, the site was found unlikely to have any unique paleontological resources. No mitigation measures or specific conditions were required for the Original Project that was analyzed in the 2019 Final MND.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. There are no changes to the Updated Project that relate to geological resources or soils are proposed.

4.5.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Know

There are no changes in circumstances or new information regarding geology and soils.

4.5.3 Impact Analysis

Would the project:

a) ***Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***

i) ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)***

The Updated Project is located on the same project site as the Original Project. The project site is located in a seismically active region of southern California. The 2019 Final MND found that active faults in the immediate vicinity of the project site include the Rose Canyon Fault Zone, which runs under the Bay; the Coronado Fault Zone, which has faults trending north-south through Coronado;

and the La Nacion Fault Zone, which lies to the east of the project site. Since there are no known active faults underlying the project site, the 2019 Final MND found the potential for the site to experience surface rupture is low. However, lurching or cracking of the ground surface adjacent to the project site during seismic events is possible. Like the Original Project, the Updated Project's design and construction would be consistent with applicable regulations and standards, such as the California Building Code, pertaining to earthquake hazards. Therefore, the Updated Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, and no new or more severe impacts would occur beyond what was analyzed for the Original Project in the 2019 Final MND.

ii) Strong seismic ground shaking?

As with all properties in the seismically active southern California region, the 2019 Final MND found that the project site would be susceptible to ground shaking produced by local faults during earthquakes. However, like the Original Project, the above-water structural components of the Updated Project would be designed and constructed in accordance with the California Building Code, which accounts for geotechnical factors affecting the site and incorporates seismic safety design features. As a result, no new or more severe impacts from seismic ground shaking would occur beyond what was analyzed for the Original Project in the 2019 Final MND.

iii) Seismic-related ground failure, including liquefaction?

The 2019 Final MND found that ground shaking during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and the type of geologic material underlying the area. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments. The 2019 Final MND found that the site is adjacent to the Bay with deep foundations extending through unconsolidated marine sediments and that these sediments would be subject to shaking hazards caused by earthquakes on regional active faults. The 2019 Final MND found that the potential for ground motion at the project site is high and the sediments on the Bay floor have a high potential for liquefaction. This finding was based on the anticipated loose nature of the Bay sediment materials underlying the project site and their saturated condition.

The 2019 Final MND discussed how remedies for ground motion and liquefaction included ground modification, or in the case of the Original Project, the use of deep foundations in the form of concrete, plastic, and steel piles. Like the Original Project, the Updated Project would be designed and constructed in accordance with the California Building Code, which accounts for geotechnical factors affecting a site and incorporates seismic safety design features. Therefore, as with the Original Project, the Updated Project would not have any new or more severe impacts due to the risks of ground failure and liquefaction than the Original Project that was analyzed in the 2019 Final MND.

iv) Landslides?

The project site is located on coastal sediment beneath the water and adjacent to San Diego Bay. According to the County of San Diego Multi-Jurisdictional Hazards Mitigation Plan, the project site

is not identified as a landside area (County 2022). Therefore, no new or more severe impacts related to landslides are anticipated beyond what was analyzed in the 2019 Final MND.

b) Result in substantial soil erosion or the loss of topsoil?

The 2019 Final MND found the terrestrial portion of the project site to be developed and paved and is not at risk of soil erosion or loss of topsoil. The marine portion of the project site was found to be located on coastal sediment beneath the water of the Bay. The pile removal and replacement process in the Updated Project would disturb the coastal sediments similar to the Original Project. However, to minimize the release of sediment into the water column, the Updated Project would also utilize silt curtains around the piles the same as the Original Project, which would contain disturbed sediment and allow it to settle back to its original location. Therefore, the Updated Project would not result in substantial soil erosion or the loss of topsoil, and new or more severe impacts would not occur beyond what was analyzed for the Original Project in the 2019 Final MND.

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

The 2019 Final MND found that the bay sediments underlying the project site may be subject to static settlement or liquefaction during a nearby seismic event. The 2019 Final MND identified remedies for ground motion and liquefaction as ground modification, or in the case of the Original Project, as the use of deep foundations in the form of concrete piles, Like the Original Project, the Updated Project would be designed and constructed in accordance with the California Building Code, which accounts for geotechnical factors affecting a site and incorporates seismic safety design features. Therefore, the Updated Project would not have any new or more severe significant Impacts related to unstable soils or geologic units than that analyzed for the Original Project in the 2019 Final MND.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

The Updated Project is located on the same project site as the Original Project. The sediment located on the Bay floor at the project site continues to consist of silty sand, which has a low potential for expansion as defined by Table 18-1-B of the Uniform Building Code. Therefore, the Updated Project would not have any new or more severe impacts related to expansive soils beyond what was analyzed for the Original Project in the 2019 Final MND.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Like the Original Project, the Updated Project would not entail the use of septic tanks or alternative disposal systems as no septic tanks or alternative wastewater disposal systems are proposed as part of the project. Therefore, no new or more severe impacts related to septic tanks would occur beyond what was analyzed for the Original Project in the 2019 Final MND.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic features?

The project-site portion of the Bay has been previously dredged and disturbed during installation of the existing piles and past activities at the project site. As such, it is not anticipated that paleontological resources are present where the project would involve ground-disturbing activities, The new piles would be installed in the same locations as the existing piles and there would be fewer piles driven under the Updated Project than in the Original Project. Therefore, the Updated Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Thus, the Updated Project would not cause any new or more severe impacts to paleontological resources or unique geologic features than the Original Project studied in the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

There are no mitigation measures or specific conditions from the 2019 Final MND identified to reduce impacts related to geology and soils.

4.6 GHG Emissions

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
VI. GHG EMISSIONS			
Would the project:			
a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	No	No	No
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND, a summary of project changes as they relate to GHG emissions, and a summary of changes in circumstances or new information which was not known and could not have been known as it relates to GHGs.

4.6.1 Summary of 2019 Final MND

No potentially significant GHG emissions impacts were identified in the 2019 Final MND. The 2019 Final MND found that most of the GHG emissions would be a result of project construction activities. Existing operation of the project site would resume following completion of construction, thus there would be no long-term increase in on-road traffic, boat traffic, utility demand, or associated emissions. The 2019 Final MND also found that the project

would comply with Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, Senate Bill (SB) 32, and the City's Climate Action Plan (CAP). Thus, no mitigation measures or specific conditions were required.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. The Updated Project would involve improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall. Construction of the Updated Project would occur over an approximately 3-year period and would take place between the hours of 7:00 AM and 4:00 PM. GHG emissions during construction would result from operation of construction equipment and on road vehicles. Like the Original Project, construction equipment would include a tugboat, crane, vibration/impact hammers, and barges, however the proposed barges rely on the tugboats for power and movement and do not generate GHG emissions. On road vehicles would include trucks used for hauling away the old piles/piers and rubble (if needed), and delivering new supplies, as well as construction worker commute vehicles. The number of haul trucks used would vary by phase depending on the number of piles to be replaced and the square footage of pier demolition and reconstruction; regardless of phase, however, the number of weekly haul truck trips would be minimal (an average of 2 per week over the life of the construction period). Like the Original Project, it is anticipated that five construction workers would be present on-site each day during construction. Project construction would occur over two phases. Phase 1 would include the rubble reuse/removal and reinforcement of the existing quay wall components of the Updated Project. This phase would begin in late 2022 and conclude in mid-2023 and active work on this phase would take approximately 3 months over this period. Phase 2 would include the demolition of Piers 1, 5 and 7 and the Pier 4/Wharf 4 improvement components of the Updated Project. This phase would begin in late 2023 and end in mid-2026 and active work on this phase would take approximately 8 months over a 4-year period in order to avoid work during the least tern mating season.

4.6.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

There are no changes in circumstances or new information regarding GHG emissions.

4.6.3 Impact Analysis

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The California Health and Safety Code Section 38505(g) defines greenhouse gas (GHG) emissions to include the following compounds: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). As individual GHGs have varying heat-trapping properties and atmospheric lifetimes, GHG emissions are converted to carbon dioxide equivalent (CO2e) units for comparison. The CO_2e is a consistent methodology for comparing GHG emissions because it normalizes various GHG emissions to a consistent measure. The most common GHG related to the Updated Project is CO_2 (CO_2e = 1).

Like the 2019 Final MND described, the District has not established thresholds of significance for GHG emission impacts. Therefore, the screening level threshold of 900 metric tons (MT) of CO_2e per year published by the California Air Pollution Control Officers Association (CAPCOA) was used in this analysis. According to CAPCOA, the 900 MT CO2e screening level threshold was low enough to capture a substantial fraction of future residential and non-residential development that will be constructed to accommodate future statewide population and job growth, and high enough to exclude small development projects that will contribute a relatively small fraction of the cumulative statewide GHG emissions.

Like the Original Project, the GHG emissions from the implementation of the Updated Project would be primarily due to construction activities. Because existing operations would resume following completion of construction, no long-term increase in on-road traffic, boat traffic, utility demand, or associated emissions is anticipated. The Updated Project's construction activities would emit GHGs primarily through the combustion of fuels in the engines of off-road construction equipment, haul trucks, and construction worker commute vehicles. Project construction of the Updated Project would occur over an approximately 4-year period. GHG emissions associated with construction equipment, haul truck trips (including disposal), and worker vehicles were calculated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 (SCAQMD 2020). Tugboat emissions were calculated using factors and calculations methods included in the Port of San Diego 2006 Emissions Inventory. The calculated GHG emissions by year are shown in Table 4.6-1, Estimated Annual Construction GHG Emissions, and the complete model outputs are included as Appendix A.

Table 4.6-1. Estimated Annual Construction GHG Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
2019 Final MND				
2019	62.37	0.01	0.00	62.84
2020	107.00	0.03	0.00	107.83
2021	105.55	0.03	0.00	106.38
2022	104.57	0.03	0.00	105.39
2023	45.02	0.01	0.00	45.37
Updated Project				
2022	40.16	0.00	0.00	140.65
2023	118.97	0.01	0.00	119.93
2024	114.36	0.01	0.00	115.29
2025	127.56	0.02	0.00	128.76
2026	78.45	0.01	0.00	79.28

As shown in Table 4.6-1, GHG emissions in each of the four construction years would be below the annual 900 MT CO2e screening threshold. In addition, updated piers and removal of dilapidated piers would increase efficiency within the shipyard, reducing transit distances and fuel consumption and thus reducing GHG emissions. Therefore, the GHG emissions for the Updated Project would not be new or more severe than those emissions for the Original Project studied under the 2019 Final MND.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As explained in the 2019 Final MND, reducing GHG emissions in California has been the focus of the State government for approximately two decades (CARB 2020). GHG emission targets established by the State legislature include reducing statewide GHG emissions to 1990 levels by 2020 (AB 32 of 2006) and reducing them to 40% below 1990 levels by 2030 (SB 32 of 2016). EO S-3-05 calls for statewide GHG emissions to be reduced to 80% below 1990 levels by 2050. EO B-55-18 calls for California to achieve carbon neutrality no later than 2045 and achieve and maintain net negative GHG emissions thereafter. These targets align with the scientifically established levels needed globally to limit the rise in global temperature to no more than 2°C, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected. These targets also align with efforts to limit the temperature increase even further to 1.5°C (UN 2015:3). The 2020 Scoping Plan, prepared by CARB, outlines the main strategies California shall implement to achieve the legislated GHG emission target for 2030 and "substantially advance toward our 2050 climate goals" (CARB 2020). The plan identifies the reductions needed by each GHG emission sector including transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste. The State has also passed more detailed legislation addressing GHG emissions associated with industrial sources, transportation, electricity generation, and energy consumption. CARB and other agencies are charged with implementing regulations that achieve the reduction goals on a statewide basis, including through increased building efficiency (through California Building Code updates) and vehicle efficiency (through truck and car rulemaking), among other things. Those statewide regulations apply to ensure local construction and operation increase efficiencies toward achievement of statewide GHG emissions reduction goals.

At the local level, the District adopted their CAP in December 2013 as discussed in the 2019 Final MND and identified the District's reduction goals and measures to be implemented to achieve the reduction goals set forth in AB 32 and long-term goals beyond 2020. The CAP included an inventory of existing (2006) and projected emissions in 2020, 2035, and 2050, as well as strategies to meet the District's goal of reducing annual GHG emissions to 25% below 2006 levels by 2035 (San Diego Unified Port District 2013). To achieve the Port's goals, the CAP detailed various GHG reduction measures related to transportation and land use, alternative energy generation, energy conservation, waste reduction and recycling, water conservation, and recycling. Therefore, AB 32, SB 32, and the District's CAP represent the most applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The Port's CAP meets the criteria within State CEQA Guidelines Section 15183.5 of the CEQA Guidelines by providing reduction targets that align with statewide goals. A critical aspect of having a CAP that fits the criteria within State CEQA Guidelines Section 15183.5 is having reduction targets that align with statewide goals. Because the Port's reduction targets outlined in the CAP parallel the State's commitment in AB 32, and aligns with statewide goals to reduce GHG emissions, the CAP is consistent with AB 32. While the Port's CAP includes a long-term 2035 goal, it does not include post-2020 reduction quantification. Therefore, the CAP cannot be used as a qualified plan for reduction of GHG emissions pursuant to Section 15183.5 of the CEQA Guidelines for projects with a post-2020 buildout date. Plans, policies, and regulations adopted for the purpose of reducing GHG emissions were developed with the intent of reducing cumulative emissions related, primarily, to long-term operational emissions. As described previously, the Updated Project would not result in a considerable increase in GHG emissions as a result of construction activities, which would

temporarily generate GHG emissions below the 900 $MTCO_2e$ threshold. The Updated Project would not increase operational repair capacity at the project site and would, therefore, not result in a long-term increase in GHG emissions. In fact, the repair. replacement and removal of piers and other infrastructure would increase efficiency by reducing transit distances and fuel consumption, thus lowering operational GHG emissions at the project site. Other CAP GHG reduction measures, such as reducing building energy use, relying more on alternative energy generation, as well as reductions in water use and waste generation, are not applicable to the Updated Project. The Updated Project would therefore be consistent with GHG reduction goals and efficiency requirements of the District's CAP, as well as statewide planning efforts, and would not result in a permanent increase in GHG emissions. Thus, similar to the Original Project, the Updated Project would not conflict with any applicable plan, policy, or regulation adopting for the purpose of reducing emissions of GHGs and no new or more significant impacts would occur beyond what was identified for the Original Project in the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

There are no mitigation measures or specific conditions from the 2019 Final MND identified to reduce impacts related to GHG emissions.

4.7 Hazards and Hazardous Materials

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
VII HAZARDS AND HAZARDOUS MATERIALS			
Would the project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No	No	No
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	No	No	No
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No	No	No
d) Be located on a site which is included on a list of hazardous materials sites	No	No	No

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
VII HAZARDS AND HAZARDOUS MATERIALS			
compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			
e) 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?	No	Yes	No
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No	No	No
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	No	No	No
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project as they relate to hazards and hazardous materials; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted, as it relates to hazards and hazardous materials.

4.7.1 Summary of 2019 Final MND

The 2019 Final MND identified a potentially significant impact related to use and transport of hazardous materials such as fuels, lubricants, and solvents for construction equipment operation and maintenance. These materials could have potentially had adverse impacts to the public and wildlife; however, the 2019 Final MND found that the implementation of mitigation measures HAZ-1 through HAZ-7 would have reduced these impacts to a level less than significant. Mitigation measure HAZ-1 would have required contractors to ensure that oils and fuels are contained in

secondary containment structures during any demolition or construction activities. Mitigation measure HAZ-2 would have required the contractor to provide training to construction workers on specific task areas. Mitigation measure HAZ-3 would have required the contractor and equipment operators to conduct equipment inspections prior to use. Mitigation measure HAZ-4 would have required the contractor to identify required instrumentation for each piece of equipment to avoid spillage of material from the barge. Mitigation measure HAZ-5 would have required the contractor to assign construction personnel to visually monitor for oil and fuel spills during construction. Mitigation measure HAZ- 6 would have required the contractor to inform construction workers as to where oil and fuel spill kits are located and how to use them. Lastly, mitigation measure HAZ-7 would have required its contractor to identify barge load limits and loading procedures and would have marked the appropriate draft level on the materials barge hull.

The Original Project could have also resulted in impacts to use and transport of hazardous materials due to removal and disposal of existing piles, which are coated in creosote, a tar-based substance that acts as a preservative against rot and has been found to be carcinogenic to humans and toxic to marine life through the process of bioaccumulation. However, the 2019 Final MND found that the implementation of mitigation measures HAZ-8 and HAZ- 9 would have reduced potential impacts associated with existing creosote-coated pilings by removing the piles at a licensed Resource Conservation and Recovery Act (RCRA) waste disposal site. Mitigation measure HAZ-8 would have required the contractor to employ a flattop barge with containment walls and “skip tubs” to prevent any sediment, wood, or metal debris from falling into the water. Mitigation measure HAZ-9 would have required the contractor to clean up the marine growth and activity-generated debris and restore the piers where removed materials are placed to pre-construction conditions.

The 2019 Final MND’s project pile removal could have potentially disturbed or stirred up sea-floor sediment, which contains hazardous materials. Implementation of mitigation measures BIO-3 and HAZ-10 would have avoided the release of hazardous materials into the environment. Mitigation measure HAZ-10 would have required HII San Diego Shipyard to conduct sediment sampling of representative areas of potential disturbance near the location of piles, and details as to how sampling procedures would have been conducted.

The 2019 Final MND did not identify any significant impacts regarding emission of hazardous materials near an existing or proposed school and significant hazards to the public due to a hazardous material site. Additionally, per the 2019 Final MND, the District maintains an emergency preparedness plan related to on-site operation, and because the proposed improvements under the Original Project would have occurred on the water side of the project site, emergency access to and from the project site via Cesar E. Chavez Parkway would have been maintained during project construction. Following the completion of construction, the site would have continued existing operations, which would not have interfered with the emergency preparedness plan. Therefore, the 2019 Final MND did not identify any significant impacts related to impairing the implementation of or physical interference with emergency response or emergency evaluation plans.

No impacts were found regarding airport land use plan impacts, private airstrip impacts, interference with an adopted emergency response plan or evacuation plan, or wildfire hazards. Because the project site is in an urbanized area surrounded by water and is not designated as a fire hazard zone, the 2019 Final MND states that there would be no impacts involving wildland fires. per the 2019 Final MND, the proposed improvements for the Original Project would have occurred above and adjacent to the Bay within an existing urban environment dominated by concrete and asphalt that is well removed from wildlands. Therefore, the Original Project would not have exposed people or structures to risk from wildland fires, and no impacts related to wildland fires would have occurred.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. The Updated Project would include removal and improvement of a portion of Pier 4/Wharf 4, removal of deteriorated Piers 1, 5 and 7, and reinforcement of the existing quay wall on the same site analyzed in the 2019 Final MND. The Updated Project would employ similar construction activities, such as pile driving, which could expose people and wildlife to creosote. No other changes to the Original Project that relate to hazards and hazardous materials are proposed.

4.7.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

The Airport Land Use Commission for San Diego County adopted a new Airport Land Use Compatibility Plan (ALUCP) for the Naval Air Station North Island (NASNI) on October 1, 2020; therefore, the Updated Project would be subject to the policies of the NASNI ALUCP. An evaluation of the Updated Project's consistency with the NASNI ALUCP policies is provided below in Section 4.7.3. No other changes in circumstances or new information related to hazards and hazardous materials, which was not known and could not have been known with the exercise of reasonable due diligence at the time the 2019 Final MND was adopted, have been identified during preparation of this checklist.

4.7.3 Impact Analysis

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

As discussed above and in the 2019 Final MND, under the Original Project, the potential exists for hazardous materials to get accidentally released into the Bay, which could cause hazards to the public and wildlife. Mitigation measures HAZ-1 through HAZ-7 would be required under the Updated Project to reduce impacts to a less-than-significant level. In addition, the existing piles at the project site are coated in creosote, which is a tar-based substance that acts as a preservative against rot and has been found to be carcinogenic to humans and toxic to marine life through the process of bioaccumulation. The Updated Project also proposes to conduct demolition, repair, and improvement of existing in-water facilities at the site, including removal and improvement of a portion of Pier 4/Wharf 4, removal of deteriorated Piers 1, 5 and 7, and reinforcement of the existing quay wall. Similar to the Original Project, removing and disposing of the existing piles would have the potential to create a hazard to the public and environment. Nonetheless, similar to the Original Project, the Updated Project would employ a contractor who would be responsible for the removal, transportation, and disposal of the removed piles and rubble. The contractor would first remove the piles and rubble from their existing positions in the Bay floor sediment via crane. The removed materials would then be temporarily placed in a container located on the barge. A debris boom would be in place to ensure no debris falls into the water throughout this process. Mitigation measures HAZ-8 and HAZ-9 would be required during this process to reduce potential impacts associated with the existing creosote-coated pilings.

Following completion of construction of the Updated Project, the project site's operational capacity would not increase; therefore, the use of hazardous materials on the site would also not increase. As such, with

implementation of mitigation measures HAZ-1 through HAZ-9, impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant. The Updated Project would not result in any new or more severe significant impacts related to transport, use, or disposal of hazardous materials than what was analyzed in the 2019 Final MND.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

The 2019 Final MND concluded that the pile removal and improvement process associated with the Original Project would have had the potential to disturb and stir up sea-floor sediment which had been found to contain contaminants of concern (COCs), including heavy metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and polychlorinated terphenyls (PCTs). The Updated Project would involve in-water activities including removal and improvement of a portion of Pier 4/Wharf 4, removal of deteriorated Piers 1, 5 and 7, and reinforcement of the existing quay wall. Similar to the Original Project, the Updated Project would have the potential to disturb and stir up sea-floor sediment, which would result in potential hazard to the public or the environment. Mitigation measure BIO-3, outlined in the 2019 Final MND, would need to be implemented under the Updated Project and would require piles to be removed and installed in a manner that reduces sediment disturbance to the greatest extent feasible. Mitigation measure BIO-3 would also require the implementation of a silt curtain around pile driving activities, which would restrict the sediment turbidity plume to the area within the curtain and would prevent sediment from spreading out through the Bay; however, the silt curtain would not restrict sub-surface contamination from being brought to the surface. As such, mitigation measure HAZ-10 would be required to be implemented to avoid hazards to the public and environment associated with impaired sediments. The measure would involve sediment sampling following pile driving, rubble removal and applicable remediation activities, if necessary. Through implementation of mitigation measures BIO-3 and HAZ-10, the Updated Project would not create a significant hazard to the public or the environment through the release of hazardous materials, and the Updated Project would not result in any new or more severe significant impacts than analyzed for the Original Project under the 2019 Final MND.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The 2019 Final MND identified Perkins Elementary School as being located one-quarter mile from the northern boundary of the project site; however, the area of the project site where the proposed improvements would occur and where hazardous materials would be handled would be on the water side of the site, approximately 0.33 miles away from the school. The Updated Project would occur within the same project site analyzed in the 2019 Final MND; thus, the same distance between the Updated Project and Perkins Elementary School would be the same as analyzed in the 2019 Final MND. Therefore, the Updated Project would not emit hazardous emissions or handle hazardous materials within one-quarter mile of a school, and impacts would be less than significant. The Updated Project would not result in any new or more severe significant impacts related to hazardous emissions within one-quarter mile of a school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Per the 2019 Final MND, the project site is listed on several Cortese List Data Resources that are indicative of a release, including the Envirostor, LUST, and Spills, Leaks, Investigations, and Cleanups databases. On the land side of the project site, the cases are related to the release of diesel and gasoline from former underground storage tanks (USTs) that impacted soil and groundwater. The 2019 Final MND found that three of the underground storage tanks (USTs) required remedial cleanup activities and their cases were closed between 1989 and 2005. Since HII San Diego Shipyard began operations at the site in 1985, the 2019 Final MND found that seven of the former USTs had been removed and one had been abandoned in place. The Updated Project would be located on the same project site as the Original Project and would also not involve the disturbance to soil or groundwater on the land side of the project site.

On the water side of the project site, listed hazardous release cases are related to past and current activities that resulted in impaired sediments. The pile replacement and rubble removal processes under the Updated Project would involve disturbance to the sediments; however, through implementation of mitigation measures BIO-3 and HAZ-10, the project would not create a significant hazard to the public or environment related to the impaired sediments. Therefore, the Updated Project would not result in any new or more severe significant impacts related to the list of hazardous materials sites compiled pursuant to Government Code §65962.5 beyond what was analyzed for the Original Project in the 2019 Final MND.

e) 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?

The 2019 Final MND found that the project site is within the Airport Influence Area (AIA) and Review Area 2 of the San Diego International Airport ALUCP. The MND found that the Original Project would have been of similar height to the existing structures and the operation of the project would have been similar to the existing shipyard's operations; therefore, the Original Project would not increase structure heights or cause an increase in severity of hazards. The Updated Project would be located within the same project site as the Original Project and would also be similar in height to the existing structures and similar to existing operations at the project site. Therefore, the Updated Project would not increase structure heights or cause an increase in severity of those hazards previously listed in the 2019 Final MND.

The project site is also located approximately 2.9 miles southeast of NASNI. The 2019 Final MND found the Original Project was not located within a Clear Zone, Accident Potential Zone, or mapped noise contour associated the NASNI Air Installations Compatible Zones (AICUZ) Update. Therefore, the 2019 Final MND did not identify significant impacts related to aircraft safety hazards or excessive noise within an airport land use plan and did not identify mitigation measures or specific conditions.

The newly adopted NASNI ALUCP shows the project site as being located inside the AIA of the NASNI ALUCP, but outside of a Clear Zone, Accident Potential Zone or mapped noise contour of the ALUCP (NASNI ALUCP 2020). Therefore, like the Original Project, the Updated Project would not have any impacts related to aircraft safety hazards or excessive noise within this land use plan. The Updated Project would be exempt from Airport Land Use Compatibility (ALUC) review because, per Table 3.3 – Exemptions from Airport Land

Use Compatibility Review of the NASNI ALUCP, the project qualifies as an alteration to an existing nonresidential use. According to the NASNI ALUCP, all projects located outside of the noise and safety zones, but within the AIA, would be required to be reviewed by the Federal Aviation Administration (FAA) or the equivalent. Thus, the Updated Project would be conditioned to either have the FAA conduct an aeronautical study of the Updated Project, and to obtain a Determination of No Hazard to Air Navigation for the construction and operation of the Updated Project, or to obtain certification by a licensed professional that there is no need to file a notice for construction or alteration per Title 14 Code of Federal Regulations § 77.9(e)(1). Thus, the Updated Project would not result in any new or more severe significant impacts related to airplane safety hazards than what was analyzed for the Original Project in the 2019 Final MND.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The majority of the Updated Project would also be located within the water side of the project site. However, reinforcement of the quay wall would occur along the land in close proximity to the water portion. However, due to its location along the water portion of the site, reinforcement of the quay wall would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The Updated Project would not result in any physical changes to access in the surrounding area, or otherwise impair implementation of emergency response or evacuation plans. In addition, construction of the Updated Project would only add two haul trips weekly to the roads, which would not impair the existing circulation system. Therefore, the Updated Project would not result in any new or more severe significant impacts related to implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Per the 2019 Final MND, the proposed improvements would occur above and adjacent to the Bay within an existing urban environment dominated by concrete and asphalt, well removed from wildlands. The Updated Project would occur within the same project site as the Original Project. Therefore, the Updated Project would not expose people or structures to risk from wildland fires, and no impact would occur. The Updated Project would not result in any new or more severe significant impacts related to wildland fires than that analyzed for the Original Project in the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

The applicable mitigation measures from the 2019 Final MND are presented below and are applicable to the Updated Project.

MM-HAZ-1 Secondary Containment Structures. The Project Applicant shall require its contractor to ensure that oils and fuels are contained in secondary containment structures during any demolition or construction activities so that spills and leaks are contained and prevented from entering the Bay. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-2 Hazards-related Worker Training. Prior to commencing any demolition or construction activities, the Project Applicant shall require its contractor to provide training to construction workers on specific task areas, including potential hazards resulting from accidental oil and/or fuel spills, and proper equipment operation. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-3 Equipment Inspection. Prior to commencing any demolition or construction activities, the contactor and equipment operators shall conduct equipment inspections prior to use to identify and address wear, faulty parts, and leaks. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-4 Proper Equipment Instrumentation. Prior to commencing any demolition or construction activities, the Project Applicant shall require its contractor to identify required instrumentation for each piece of equipment to avoid spillage of material from the barge. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-5 Hazardous Materials Monitoring. Prior to commencing any demolition or construction activities, the Project Applicant shall require its contractor to assign construction personnel to visually monitor for oil and fuel spills during construction. If spilled oil or fuel is detected, all equipment shall be shut down and the source of the spill shall be identified, contained, and reported. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-6 Oil/Spills Kits. Prior to commencing any demolition or construction activities, the Project Applicant shall require its contractor to inform construction workers as to where oil/fuel spill kits are located, how to deploy the oil-absorbent pads, and proper disposal guidelines. The barge shall have a full complement of oil/fuel kits on-board to allow for quick and timely implementation of spill containment. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-7 Barge Loading Procedures. Prior to commencing any demolition or construction activities, the Project Applicant shall require its contractor to identify barge load limits and loading procedures and shall mark the appropriate draft level on the materials barge hull. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-8 Removed Pile Placement. When placing pulled and removed piles and debris in the barge, the Project Applicant shall require its contractor to employ a flattop barge with containment walls and "skip tubs" to prevent any sediment, wood, or metal debris from falling into the water. The contractor shall locate the barge as close to shore as possible when transferring materials and/or debris on and off of the work barge. If necessary, traps shall be utilized to prevent debris from falling into the water. This measure shall be denoted on the construction plans and/or construction

contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-9 Removed Material Clean-up. The Project Applicant shall require its contractor to clean up the marine growth and activity-generated debris and restore the piers where removed materials are placed to pre-construction conditions. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-10 Conduct Sediment Sampling and Implement Remediation Measures. At the conclusion of the pile driving, the Project Applicant shall conduct sediment sampling of representative areas of potential disturbance near the location of piles. Sampling shall be conducted in accordance with the *Water Quality Control Plan for Enclosed Bays and Estuaries* (SWRCB 2009). Sediment sampling results shall rely on the Effects Range – Low (ER-L) and Effects Range – Medium (ER-M) guideline values of the National Oceanic and Atmospheric Association (NOAA) Screening Quick Reference Tables (Buchman 2008). If the sediment samples show concentrations of sediment contamination above the guideline values, the Project Applicant shall delineate the extent of cross-contamination and propose remediation approaches (subject to approval by the District and any other agencies with jurisdiction over site contamination) that may include, but are not limited to, dredging, placement of sand cover, or Enhanced Monitored Natural Recovery (EMNR) sand containing active carbon. The Project Applicant shall implement the approved remediation. The results of the sampling and remediation shall be documented in a report to be reviewed and approved by the District, RWQCB, and any other appropriate regulatory agencies.

Also, see Section 4.3.3 Biological Resources above.

MM-BIO-3 (see above)

4.8 Hydrology and Water Quality

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
VIII HYDROLOGY AND WATER QUALITY			
Would the project:			
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	No	No	No
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the	No	No	No

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
VIII HYDROLOGY AND WATER QUALITY			
project may impede sustainable groundwater management of the basin?			
ci) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or in a manner which would result in substantial erosion or siltation on- or off-site?	No	No	No
cii) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff water in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	No	No	No
ciii) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or through the addition of impervious surfaces, in a manner which would 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?	No	No	No
civ) 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 impede or redirect flood flows?			
d) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	No	No	No
e) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	No	No	No

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
VIII HYDROLOGY AND WATER QUALITY			
f) Expose people or structure to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	No	No	No
g) In flood hazard, tsunami, or seiche zones, risk release of pollutants dude to project inundation?	No	No	No
h) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project, as they relate to hydrology and water quality; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted.

4.8.1 Summary of 2019 Final MND

The 2019 Final MND identified potential impacts regarding violating water quality standards or waste discharge requirements. The Original Project had the potential to accidentally discharge hazardous materials into the Bay due to its proximity to the waterfront. Implementation of mitigation measures HAZ-1 through HAZ-7 would have helped ensure that the Original Project would contain materials and minimize any potential release into the Bay. Additionally, the Original Project would have utilized a fully contained stormwater diversion system, which would have limited discharge from the project site into the Bay during construction and operation. Existing creosote-coating piles at the project site are known to be carcinogenic to humans and toxic to marine life, and to avoid discharge of the creosote-coating into the Bay the Original Project would have implemented mitigation measure HAZ-8. The pile removal and improvement process of the Original Project would have stirred up sea-floor sediment, which contains hazardous sediment. Implementation of mitigation measure BIO-3 would have required silt curtains and slow removal of piles to limit the spread of hazardous sediment into the water column. All work would have been done in compliance with the San Diego Bay Watershed Management Area Water Quality Improvement Plan (WQIP) and Regional Municipal Separate Storm Sewer System (MS4) Permit (Order No. R9-2013-0001). Additionally, implementation of mitigation measure HAZ-10 would have helped to lower a potentially significant impact to a level less than significant.

Due to the reasons mentioned above, the Original Project could have potentially degraded water quality due to the accidental release of hazard materials into the Bay. The existing on-site stormwater diversion system and

implementation of mitigation measures HAZ 1 through HAZ-8, HAZ-10, and BIO-3 would have helped the Original Project avoid substantially degrading water quality.

The 2019 Final MND did not anticipate any usage of groundwater as part of the Original Project; thus, no impact to groundwater supplies would have occurred. The lack of streams or rivers in the vicinity to the project site would have resulted in no impacts to existing drainage patterns and potential erosion or siltation. The Original Project would not have altered drainage patterns or increased the amount or rate of surface runoff in a manner that would have resulted in flooding on- or off-site or increased the amount of impervious surface on-site. Therefore, the Original Project would not have increased runoff; or result in flooding impacts. The areas surrounding the project site are developed and paved; therefore, the project site would not have been at risk of inundation by mudflow or inundation by seiche because seiches are typically associated with land-locked bodies of water, none of which are present near the project site.

Per 2019 Final MND, the land portion of the project site is located in Federal Emergency Management Agency (FEMA) Special Flood Hazard Areas Zone A and the water portion of the project site is located within Special Flood Hazard Zone AE. Both of these zones are subject to inundation. However, the pier and wharf deck structures in the Original Project would have been at least 10 feet above the mean lower low water (MLLW); thus, they would not have been subject to potential inundation and impacts would have been less than significant. In addition, due to the pier and wharf deck structures being located at least 10 feet above MLLW, sea level rise associated with climate change would not have inundated the Original Project structures or exposed people or structures to significant risk of loss, injury, or death resulting from sea level rise.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. The Updated Project proposes the removal and improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall, while the Original Project proposed the replacement of several piers. No other changes to the Original Project that relate to water quality and hydrologic resources are proposed.

4.8.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

No changes in circumstances or new information, which was not known and could not have been known with the exercise of reasonable due diligence at the time the 2019 Final MND was certified as complete, related to hydrology and water quality have been identified during the preparation of this checklist.

4.8.3 Impact Analysis

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Similar to the Original Project analyzed in the 2019 Final MND, the construction contractor for the Updated Project would use hazardous materials such as fuels, lubricants, and solvents for equipment operation and maintenance. These materials would be used on and adjacent to the Bay and would have the potential to accidentally discharge into the Bay. The Updated Project proposes the removal and improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall. These disturbances would result in similar impacts to water quality as analyzed in the 2019 Final MND but to a lesser extent because piers 1, 5 and 7 would be removed and not replaced. Implementation of mitigation measures HAZ-1 through HAZ-7, outlined in the 2019 Final MND, would also be implemented by the Updated Project to ensure the project contains the materials on the site and minimizes their release into the Bay. In addition, similar to the Original Project, the Updated Project would utilize a fully contained stormwater diversion system that is effective up to a one-inch per hour storm event. The diversion system would capture, treat, and dispose of runoff water in the City's municipal sewer system. The portion of Pier 4 that would be replaced would also include systems to capture and redirect stormwater to the existing stormwater diversion system. The existing stormwater diversion system would continue to limit discharge from the project site into the Bay during construction and operation of the Updated Project.

In addition, as discussed above and in the 2019 Final MND, the existing wood piles have a creosote coating, which is a tar-based substance that acts as a preservative against rot and has been found to be carcinogenic to humans and toxic to marine life. The process of removing the piles would potentially cause leaching of the creosote substance from the wood into the Bay. Similar to the Original Project, to avoid discharging leached creosote into the Bay, the Updated Project would be required to implement mitigation measure HAZ-8, which would involve placing the removed piles in within containment walls or "skip tubs" while they are temporarily stored on the barge prior to off-site transport and disposal at a licensed waste disposal site, which would accept the creosote-treated logs. Mitigation measure HAZ-8 would also involve locating the barge as close to shore as possible when transferring materials and/or debris on and off the barge.

Additionally, like the Original Project, a series of the construction-related BMPs would be implemented to minimize impacts from the Updated Project on the surrounding environment. A debris boom would be deployed around the project area to contain project-related debris and a catch system would be placed under the piers during pier removal. Any wood material that falls into the water would be recovered by a small boat towed over to the material recovery area and lifted by crane. No construction materials, equipment, debris, or waste would be placed or stored where it may be subject to tidal and wave erosion or dispersion. Machinery or construction materials not essential for the Updated Project would not be allowed in the intertidal zone at any time, and the construction contractor would ensure that no debris, soil, sand, sawdust, rubbish, cement, oil, or petroleum products from construction would be allowed to enter into or placed where it may be washed by rainfall or runoff into coastal waters. When transferring materials and/or debris on and off the work barge, the contractor would only locate the barge as close to the shore as possible. If necessary, tarps would be utilized to prevent any debris from falling into the water. All removed piles and pier debris would remain on

the barge, and the contractor would employ a flattop barge with containment walls to prevent any sediment or debris from falling into the water. HII San Diego Shipyard would continue to supply plastic lined skip tubs for the contractor to use for placing the debris, and the contractor would furnish and install all materials necessary to line the skip tubs with a plastic liner prior to the placement of the debris into the skip tubs. All debris that is not able to be recycled or repurposed would be disposed of at Otay Landfill in accordance with applicable laws and regulations.

For cementitious slurry fill used to reinforce the quay wall, a series of BMPs would also be used to avoid potential impacts to the surrounding waters. The contractor would monitor the pH of surrounding waters while slurry fill pouring is underway and during the post construction period. Although the joints of the sheet pile wall should be sufficiently water-tight and should prevent any leakage of cementitious slurry, a silt curtain would be deployed to prevent any incidental slurry migration. In addition, the water between the existing and proposed bulkhead would be pumped out directly to HII San Diego Shipyard's on-site wastewater treatment facility, where the water would be treated and disposed to the City of San Diego's sewage system.

Similar to the Original Project, the pile removal and improvement process would disturb and stir up sea-floor sediment which has been found to contain contaminants of concern. Mitigation measure BIO-3, outlined in Section 4.3.3 above, requires using a silt curtain and removing piles slowly and would be implemented during construction of the Updated Project to limit the spread of sediment in the water column. Similar to the Original Project, construction of the Updated Project, would be done in accordance with the San Diego Bay Watershed Management Area WQIP and Regional MS4 Permit (Order No. R9-2013-0001, as amended by Order No. R9- 2015-0001 and R9-2015-0100) since the Updated Project would be dealing with water quality and using an existing stormwater diversion system to redirect storm water to the City's municipal sanitary sewer system.

Lastly, the Updated Project would include implementation of mitigation measure HAZ-10 as outlined in the 2019 Final MND, which would require the project Applicant to carry out appropriate remediation measures if the Updated Project's pile removal and driving activities cause a substantial amount of contaminated sediment to be present within the Bay. With the use of the existing on-site stormwater diversion system, the implementation of construction BMPs and the implementation of mitigation measures HAZ-1 through HAZ-8, and HAZ-10, included in the 2019 Final MND, the Updated Project would not result in new or more severe significant impacts to water quality as that analyzed for the Original Project in the 2019 Final MND.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project site is also located within the Coastal Plain of San Diego Groundwater Basin (Department of Water Resources 2021). The Coastal Plan of San Diego Groundwater Basin is considered a low priority basin and therefore a groundwater sustainability plan is not required for this basin, per the Sustainable Groundwater Management Act (Groundwater Exchange 2021). Therefore, the Updated Project would not conflict with a groundwater management plan. Like the Original Project, no groundwater would be withdrawn as part of construction or operation associated with the Updated Project. The structures proposed under the Updated Project would be located on piles above the Bay and would not interfere with groundwater recharge. The Updated Project would involve one landside component, reinforcement of the quay wall. However, this component would include repair of an existing above-ground feature and would

not result in substantial land disturbance that would interfere with groundwater supplies or groundwater recharge. Therefore, the project would not deplete groundwater supplies or conflict with a sustainable groundwater management plan. Thus, the Updated Project would not result in any new or more severe significant impacts related to groundwater supplies or recharge than the Original Project analyzed in the 2019 Final MND.

ci) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

There are no streams or rivers in the vicinity of the project site. Similar to the Original Project, the existing structural layout of the project site would be reconfigured through the demolition, construction, and reconstruction of pier and wharf structures in the Updated Project. However, the reconfiguration proposed in the Updated Project would not alter the drainage pattern of the site in a manner which would result in erosion or siltation on-site or off-site. The Updated Project would also involve reinforcement of portions of the existing concrete rubble quay wall by installing steel sheet pile (type ZZ 26-700) along the outer edge of the quay wall and a concrete cap would be installed on top of the sheet pile; however, the quay wall would not be reconfigured in a manner in which it would alter the drainage patterns of the site. In addition, the project site would continue to employ the stormwater diversion system that captures runoff water and minimizes the potential for erosion or siltation to occur. Thus, the Updated Project would not cause any more new or severe impacts related to erosion or siltation beyond those analyzed for the Original Project in the 2019 Final MND.

cii) 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Chollas Creek is located approximately one mile southeast of the project site and would not be affected by the Updated Project based on this distance. Similar to the Original Project, the existing structural layout of the project site would be reconfigured through the demolition, construction, and reconstruction of pier and wharf structures in the Updated Project. However, the reconfiguration proposed in the Updated Project would not alter the drainage pattern of the site or increase in the amount or rate of surface runoff in a manner which would result in flooding on- or off-site. In addition, the project site employs a stormwater diversion system that captures runoff water and minimizes the potential for flooding to occur. Thus, the Updated Project would not cause any more new or severe impacts related to flooding beyond those analyzed for the Original Project in the 2019 Final MND.

ciii) 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 create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Like the Original Project, the proposed pier and wharf improvements in the Updated Project would not substantially increase the amount of impervious surface on-site. Therefore, the Updated Project would not create an increase in runoff. The Updated Project would also involve reinforcement of portions of the

existing concrete rubble quay wall by installing steel sheet pile (type ZZ 26-700) along the outer edge of the quay wall and a concrete cap would be installed on top of the sheet pile; however, the quay wall would not be reconfigured in a manner in which it would alter the drainage patterns of the site. Like the Original Project, the Updated Project would utilize a fully contained stormwater diversion system that is effective up to a one-inch per hour storm event. The diversion system would capture, treat, and dispose of runoff water in the City's municipal sewer system. The existing stormwater diversion system would continue to limit discharge from the project site into the Bay during construction and operation of the Updated Project and would have the capacity to accommodate runoff associated with the project. In addition, the portion of Pier 4 that would be replaced would also include systems to capture and redirect stormwater to the existing stormwater diversion system. Thus, the Updated Project would not cause any more new or severe impacts related to stormwater drainage systems or polluted runoff beyond those analyzed for the Original Project in the 2019 Final MND.

civ) 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 create or contribute runoff water which would impede or redirect flood flows?

According to the Federal Emergency Management Agency (FEMA), the land portion of project site is located within Special Flood Hazard Areas Zone A and the water portion of the project site is located within Special Flood Hazard Zone AE (FEMA 2012). Both Zone A and Zone AE are areas subject to inundation by the one-percent-annual-chance flood event. Zone A indicates an area where no base flood elevations have been determined and Zone AE indicates an area where base flood elevations have been determined. The base flood elevation associated with Zone AE within the water portion of the project site is 8 feet (FEMA 2012). Because the pier and wharf deck structures of the Updated Project would be at least 10 feet above MLLW, they would not be subject to inundation by flood waters and would not impede or redirect flood flows. In addition, although the quay wall would be within the flood elevation, it would not alter the site in a manner that would impede or redirect flood flows. As such, the Updated Project would not result in any new or more severe impacts to flood flows beyond what was analyzed for the Original Project under the 2019 Final MND.

d) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

As with the Original Project, the Updated Project would not include housing and would, therefore, not place housing within a 100-year flood hazard area or other flood hazard delineation map. As such, the Updated Project would not result in any new or more severe impacts beyond what was analyzed for the Original Project under the 2019 Final MND.

e) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

According to the Federal Emergency Management Agency (FEMA), the land portion of project site is located within Special Flood Hazard Areas Zone A and the water portion of the project site is located within Special Flood Hazard Zone AE (FEMA 2012). Both Zone A and Zone AE are areas subject to inundation by the one-percent-annual-chance flood event. Zone A indicates an area where no base flood elevations have been determined and Zone AE indicates an area where base flood elevations have been determined. The base flood elevation associated with Zone AE within the water portion of the project site is 8 feet (FEMA 2012). Because the pier and wharf deck structures of the Updated Project would be at least 10 feet above MLLW,

they would not be subject to inundation by flood waters. In addition, although the piles and quay wall would be within the flood elevation, they would not alter the site in a manner that would substantially impede or redirect flood flows. As such, the Updated Project would not result in any new or more severe impacts to flood flows beyond what was analyzed for the Original Project under the 2019 Final MND.

f) Expose people or structure to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

According to the San Diego County Multi-Jurisdictional Hazard Mitigation Plan (County 2017), the project site is not located within a high-risk dam inundation area. The closest dam to the project site is at Chollas Reservoir, approximately 5.5 miles to the northeast. Like the Original Project, the Updated Project would not expose people or structures to risk of loss, injury, or death resulting from flooding as a result of dam failure.

The project site is located within and adjacent to the Bay, which is subject to the effects of anticipated sea level rise. CEQA does not require a lead agency to analyze the potential impact of projected sea level rise on a proposed project. Specifically, CEQA requires an agency to analyze the impacts of a proposed project on the existing environment and generally does not require that public agencies analyze the impact that existing environmental conditions might have on a project's future users or residents unless the project itself might worsen existing environmental hazards (California Court of Appeals 2011; Supreme Court of California 2015). However, pursuant to the Coastal Act and the California Coastal Commission's Sea Level Rise Policy Guidance document, a project in the California Coastal Zone, like the Updated Project, must address sea level rise and resiliency of the project and coastal resources.

According to the Climate Change Related Impacts in San Diego Region by 2050 study (California Climate Change Center 2009), sea levels in the San Diego region are projected to rise by 12 to 18 inches by year 2050. The most widely used guidance for considering sea level rise along the California coastline is now the California Coastal Commission's (CCC) Sea Level Rise Policy Guidance, Draft Science Update – October 2018 (CCC 2018). Based on the Original Project's anticipated lifetime of approximately 60 years, the 2019 Final MND used the projected sea level rise for the year 2080. The projected sea level rise for year 2080 in San Diego was 2.5 feet under the Low Risk Aversion scenario (upper limit of "likely range"), 4.6 feet under the Medium-High Risk Aversion scenario (1-in-200 chance), and 6.7 feet under the Extreme Risk Aversion scenario (single scenario; CCC 2018). The elevation of the project site was found to be approximately 10 feet above MLLW, while the proposed structures under the Original Project were found to be at least 10.5 feet above MLLW. The highest tide for the Bay is 7.79 feet above MLLW. Assuming the 2080 sea level rise estimates for the full lifetime of the project, the maximum water line of the Bay was estimated to range between 10.29 and 14.49 feet. Because the Original Project's wharf structures would have been at least 10.5 feet above MLLW, the 2019 Final MND found that the projected sea level rise would not inundate the structures under the Low Risk Aversion scenario but would inundate the structures under the Medium-High Risk Aversion scenario and the Extreme Risk Aversion scenario. The Extreme Risk scenario was represented as a worst-case scenario at the maximum project life in the 2019 Final MND, and the sea level was estimated to be approximately four feet above the wharf structures during maximum tide. Thus, the 2019 Final MND found that the Original Project would be exposed to sea level rise and associated extreme high tides and wave action in the future; however, the Original Project improvements, most notably the steel and concrete piles, would allow the pier and wharf structures built to withstand increased tide and wave action associated with sea level rise beyond the current capabilities of the deteriorating structures.

Like the Original Project, the Updated Project would also be exposed to sea level rise and associated extreme high tides and wave action in the future, but the Updated Project also proposes to improve the pier, wharf and quay wall structures and to remove deteriorating piers that could not withstand increased tide and wave action associated with sea level rise. The Updated Project would not house people and would be able to be evacuated in the event of extreme tide or wave action. In addition, the Updated Project's CDP would require that the project Applicant retrofit the structures to withstand high tides and waves that reach above their bases before the sea level becomes problematic. In addition, it is likely that by 2080 adaptive management policies would be developed and would apply to redevelopment or rehabilitation along the waterfront to address the sea level scenario at that time. Therefore, the Updated Project would not expose people or structures to a significant risk of loss, injury, or death resulting from sea level rise, and no new or more severe impacts would be created beyond those analyzed for the Original Project in the 2019 Final MND.

g) In flood hazard, tsunami, seiche or mudflow zones, risk release of pollutants due to project inundation?

Tsunamis are seismic sea waves generated by sudden movements of the sea floor caused by submarine earthquakes, landslides, or volcanic activity. The project site is within a tsunami inundation zone mapped by the Tsunami Inundation Map for Emergency Planning for the Point Loma Quadrangle (California Emergency Management Agency 2009). Therefore, the potential for a tsunami to occur at the project site is considered high. A strong earthquake lasting 20 seconds or more near the coast may generate a tsunami. The West Coast & Alaska Tsunami Warning Center is responsible for issuing warnings of potential tsunamis along the west coast of the United States. The County of San Diego Office of Emergency Services also issues tsunami warnings and provides guidelines for what to do during and after a tsunami warning, and the Port Harbor Police have a tsunami early response/warning protocol. In the event of a tsunami or tsunami warning, evacuation protocol outlined in the project site-specific Emergency Action Plan, including evacuation routes and methods, would be followed. Thus, sufficient tsunami response procedures continue to be in place that would allow for the timely evacuation of workers present at the project site during construction and operation of the Updated Project. In addition, there would be no change in exposure to tsunami hazards from the existing conditions or the conditions analyzed under the Original Project because the Updated Project would be improving existing structures and removing deteriorating structure that could not withstand tsunamis.

Like the Original Project, the Updated Project would not be at risk of inundation by mudflow because the project site and surrounding areas are generally flat and paved and, therefore, incapable of producing mudflows. The Updated Project would also not be at risk of inundation by seiche because seiches are typically associated with land-locked bodies of water, none of which are near the project site. Therefore, no impacts related to inundation by tsunami, mudflow or seiche would occur, and no new or more severe impacts would occur beyond what was analyzed for the Original Project under the 2019 Final MND.

h) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed above under question VIIIa, the 2019 Final MND found that the Original Project would have the potential to degrade water quality from the use of hazardous materials such as fuels, lubricants, and solvents for equipment maintenance and operation, from the handling of the creosote-coated piles to be removed, and from disturbance of Bay-floor sediment that contains COCs. However, through use of the existing on-site stormwater diversion system, implementation of construction-related BMPs, and

implementation of mitigation measures HAZ-1 through HAZ-8, HAZ-10, and BIO-3, the project would avoid obstructing implementation of a water quality control plan. The Updated Project's work would be done in accordance with the San Diego Bay Watershed Management Area Water Quality Improvement Plan (WQIP) and Regional Municipal Separate Storm Sewer System (MS4) Permit (Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and R9-2015-0100 since the Updated Project would be dealing with water quality and using a storm water diversion system to redirect storm water to the City's municipal sanitary sewer system.

The project site is also located within the Coastal Plain of San Diego Groundwater Basin (Department of Water Resources 2021). The Coastal Plan of San Diego Groundwater Basin is considered a low priority basin and therefore a groundwater sustainability plan is not required for this basin, per the Sustainable Groundwater Management Act (Groundwater Exchange 2021). Therefore, the Updated Project would not conflict with a groundwater management plan. Like the Original Project, no groundwater would be withdrawn as part of construction or operation associated with the Updated Project.

As such, with the implementation of these mitigation measures would not result in any new or more severe significant impacts related to the implementation of a water quality or sustainable groundwater management plan beyond what was analyzed for the Original Project under the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

The applicable mitigation measures from the 2019 Final MND are presented below and are applicable to the Updated Project.

MM-HAZ-1 through MM-HAZ-10

See Section 4.7.3, Hazards and Hazardous Materials Impacts Analysis above.

MM-BIO-3

See Section 4.3.3, Biological Resources Impacts Analysis above

4.9 Land Use and Planning

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances ?	Changes in Circumstances Constitutes New Information of Substantial Importance?
IX. LAND USE AND PLANNING			
Would the project:			
a) Physically divide an established community?	No	No	No
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No	Yes	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project as they relate to land use and planning; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted.

4.9.1 Summary of 2019 Final MND

The 2019 Final MND did not identify potentially significant impacts regarding physically dividing an established community or conflicting with any relevant land use plan, policy, or regulation associated with the Original Project. The Original Project site was located within existing property boundaries and no component of the project would have introduced a barrier or division to an established community. The project site is also located in the PMP Planning District 4, which defines the project site's land use designation as Marine Related Industrial and the water use designation as Specialized Berthing. Operations under the Original Project would have remained consistent with these land and water use designations. Additionally, the project site was located in the Coastal Zone and subject to the California Coastal Act. The Original Project would have complied with all relevant California Coastal Act policies and regulations.

As discussed above in Section 4.3, Biological Resources, the Original Project was subject to the Bay INRMP, which helps guide planning, management, conservation, restoration, and enhancement of the Bay ecosystem. The 2019 Final MND did not anticipate the Original Project to substantially alter the Bay ecosystem, but could potentially impact sensitive habitats and species. Implementation of mitigation measures BIO-1, BIO-2, BIO-3, and BIO-4 would have ensured that the Original Project would not have impeded implementation of conflict with the INRMP.

Changes in the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. No changes to the Original Project that relate to land use and planning are proposed.

4.9.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

While the 2019 Final MND analyzed the ALUCP for the San Diego International Airport, the ALUC for San Diego County adopted a new ALUCP for the NASNI on October 1, 2020; therefore, the Updated Project will be subject to the policies of the NASNI ALUCP. An evaluation of the Updated Project's consistency with the NASNI ALUCP policies is provided below in Section 4.9.3, Impact Analysis. No other changes in circumstances or new information related to land use and planning, which was not known and could not have been known with the exercise of reasonable due diligence at the time the 2019 Final MND was adopted, have been identified during preparation of this checklist.

4.9.3 Impact Analysis

Would the project:

a) Physically divide an established community?

Like the Original Project, all construction and operational activities under the Updated Project would occur within the existing project site. No component of the Updated Project would introduce a barrier or division to, or otherwise result in a conflict with, the surrounding commercial or industrial development or any other established community. Accordingly, the Updated Project would have no impact on established communities and would not result in any new or more severe significant impacts related to division of an established community then what was studied in the 2019 Final MND.

Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Consistency with the Coastal Zone Management Act and California Coastal Act

The Coastal Zone Management Act of 1972 ensures that development projects in coastal areas are designed and sited in a manner that is consistent with coastal zone land uses, maximizes public health and safety, and ensures that biological resources within the coastal zone are protected. The California Coastal Act of 1976 governs land use planning for the entire coastal zone of California. The California Coastal Act includes policies for public access to the coast, recreation, marine environment, land resources, development, and SLR.

Sections of the California Coastal Act that are applicable to the Updated Project are covered in Table 4.9-1, Updated Project's Consistency with California Coastal Act Policies and Goals.

Table 4.9-1. Updated Project's Consistency with California Coastal Act Policies and Goals

California Coastal Act Policy or Goal	Updated Project Consistency
Section 30230. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall	Consistent. The Updated Project would maintain, enhance and restore marine resources, and with the implementation of mitigation measures as identified in Section

Table 4.9-1. Updated Project's Consistency with California Coastal Act Policies and Goals

California Coastal Act Policy or Goal	Updated Project Consistency
be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.	4.3.3, Biological Resources, would be carried out in a manner that sustains the biological productivity of the Bay and maintains the healthy populations of all species of marine organisms.
Section 30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.	Consistent. With the implementation of mitigation measures as identified in Section 4.3.3, Biological Resources. the Updated Project would maintain the biological productivity and quality of the Bay and would minimize adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and not interfering with the surface waterflow as described in section 4.8.3, Hydrology and Water Quality.
Section 30232. Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.	Consistent. With the implementation of mitigation measures as identified in Section 4.7.3, Hazards and Hazardous Materials. the Updated Project would protect against the spillage of hazardous substances during use or transportation of such materials. The mitigation measure would ensure effective containment and cleanup facility would be provided for accidental spills should one occur.
Section 30233. The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: (1) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps. Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems. In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland	Not applicable. The Updated Project does not include the filling or dredging of the Bay. Consistent. The Updated Project does not propose dredging, and the rubble removed that is proposed would be repurposed on site or disposed of in the Otay Mesa landfill in accordance with all federal, state and local laws and regulations. does not include the filling or dredging of the Bay.

Table 4.9-1. Updated Project's Consistency with California Coastal Act Policies and Goals

California Coastal Act Policy or Goal	Updated Project Consistency
or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California," shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.	Not applicable. The Updated Project does not include the filling or dredging of an existing estuary or wetland.
Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.	Consistent. The Updated Project would not impede the movement of sediment and nutrients that would otherwise be carried by stormwater runoff into the Bay. The Updated Project's terrestrial portion of the project site would be developed and paved and is not at risk of soil erosion or loss of topsoil. The marine portion of the Updated Project would be located on coastal sediment beneath the water of the Bay. The pile removal and replacement process in the Updated Project would disturb the coastal sediments similar to the Original Project. However, to minimize the release of sediment into the water column, the Updated Project would also utilize silt curtains around the piles, which would contain disturbed sediment and allow it to settle back to its original location.
Section 30235. Revetments breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.	Consistent. The Updated Project proposes to rehabilitate portions of an existing quay wall that is required to serve an existing shipyard, which is a coastal-dependent use. The quay wall is in danger of collapse and is in need of an upgrade.
Section 30240. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.	Consistent. The Updated Project would maintain, enhance and restore marine resources and habitat with the implementation of mitigation measures as identified in Section 4.3.3, Biological Resources, and would remove deteriorated structures that would reduce shading in the Bay and allow eelgrass habitat to flourish. The project site is located near Cesar Chavez Park; however, the Updated Project does not propose a new industrial development, as it is an existing shipyard already developed.

Table 4.9-1. Updated Project's Consistency with California Coastal Act Policies and Goals

California Coastal Act Policy or Goal	Updated Project Consistency
	Upon completion of the Updated Project's construction activities, existing operations at the project site would resume and noise levels and activities would return to existing conditions. Therefore, the Updated Project would not degrade the area around Cesar Chavez Park and the recreational activities of this area can continue.
Section 30250. (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50% of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.	Consistent. The Updated Project is not a new industrial development, as it is an existing shipyard already developed in an area equipped with adequate public services.
Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.	Consistent. As described in Section 4.1.3, Aesthetics, the scenic and visual quality of the area have been considered and protected. The proposed piers have been sited and designed to protect scenic views to an along the Bay and are visually compatible with the surrounding area. The project is also not located in a highly scenic area.
Section 30253. New development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. (c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development. (d) Minimize energy consumption and vehicle miles traveled.	Consistent. The Updated Project would assure the structural integrity and stability of existing maritime facilities and shall remove or rehabilitate deteriorating maritime facilities. Due to the urban nature of the project site, the Updated Project is not likely to be subject to fire hazard, and the project elements are intended to protect the shoreline and would address an existing failing quay wall and structural pile deficiencies. These project elements would not substantially increase in-water fill volumes and, therefore, would not have potential to create flood hazards. The Updated Project would also be consistent with the requirements of the SDAQPD and CARB as described in Section

Table 4.9-1. Updated Project's Consistency with California Coastal Act Policies and Goals

California Coastal Act Policy or Goal	Updated Project Consistency
	4.2.3, Air Quality and would have minimal construction-related VMT as described in Section 4.11.3, Transportation.
Section 30255. Coastal-developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.	Consistent, the Updated Project is an existing coastal-dependent use that would not be sited in a wetland
Section 30706. In addition to the other provisions of this chapter, the policies contained in this section shall govern filling seaward of the mean high tide line within the jurisdiction of ports: The water area to be filled shall be the minimum necessary to achieve the purpose of the fill. The nature, location, and extent of any fill, including the disposal of dredge spoils within an area designated for fill, shall minimize harmful effects to coastal resources, such as water quality, fish or wildlife resources, recreational resources, or sand transport systems, and shall minimize reductions of the volume, surface area, or circulation of water. The fill is constructed in accordance with sound safety standards which will afford reasonable protection to persons and property against the hazards of unstable geologic or soil conditions or of flood or storm waters. (d) The fill is consistent with navigational safety.	Not applicable. The Updated Project does not propose fill.
Section 30708. All port-related developments shall be located, designed, and constructed so as to: Minimize substantial adverse environmental impacts. Minimize potential traffic conflicts between vessels. Give the highest priority to the use of existing land space within harbors for port purposes, including, but not limited to, navigational facilities, shipping industries, and necessary support and access facilities. Provide for other beneficial uses consistent with the public trust, including, but not limited to, recreation and wildlife habitat uses, to the extent feasible.	Consistent. The Updated Project would be located, designed, and constructed so as to minimize substantial adverse environmental impacts and minimize potential traffic conflicts between vessels. The Updated Project would rehabilitate and restore an existing shipyard, which is a coastal-dependent maritime use.

Sea Level Rise

The CCC enforces the Coastal Zone Management Act by certifying that a proposed project is consistent with the California Coastal Act. Pursuant to the California Coastal Act and the CCC Sea Level Rise Policy Guidance document (2018), projects in the California Coastal Zone must address SLR and resiliency of the project and coastal resources. The project site is within the California Coastal Zone and is subject to the Coastal Zone Management Act and California Coastal Act. Table 4.9-2 includes a discussion of the project's consistency with CCC Sea Level Rise Policy Guidance (2018).

Table 4.9-2. California Coastal Commission Sea Level Rise Policy Guidance

Steps for Addressing Sea Level Rise	Project Discussion
1. Establish the projected sea level rise (SLR) range for the Updated Project	The Updated Project life is anticipated to be 50 years. Construction of the various project components would be completed in 2022 to 2024. Therefore, the range of SLR projections applicable to the Updated Project would be 2050 to 2070. Because the project components include in-water structures to support maritime infrastructure, the extreme risk aversion scenario was used. Under this scenario, the projected SLR at the project site is anticipated to be 2.7 to 5.2 feet.
2. Determine how SLR impacts ay constrain the project site	Impacts associated with SLR generally include erosion, inundation, flooding, wave impacts, and saltwater intrusion. The project site would be susceptible to inundation and storm surge under the scenarios described in Step 1 above. However, the various Updated Project components that would be constructed or repaired include in-water structures that are already exposed to these hazards. The project would not exacerbate projected damage due to SLR; rather, the Updated Project includes improvements to reinforce the existing shoreline through (1) installation of a sheet-piled bulkhead at the proposed Quay Wall Repair (2) repairs to revetment showing signs of wear, fracture, and collapse; and (3) repairs or removal to existing structural piles and piers showing deterioration, cracking, corrosion, and wear. These project components are intended to improve resiliency to SLR within the project site.
3. Determine how the project may impact coastal resources over time, considering SLR	The project site is developed with marine-related, water-dependent industrial uses. The project site lacks many coastal resources, including public access and recreation, agricultural resources, natural landforms, scenic resources, and archaeological and paleontological resources. However, the project site includes water quality and natural resources. As discussed in Sections 4.3, Biological Resources, and Section 4.8, Hydrology and Water Quality, the Updated Project would include measures to reduce impacts on these resources. The Updated Project would not exacerbate the potential for impacts on water quality and natural resources from projected SLR. The Updated Project includes improvements to existing infrastructure and any potential impacts from SLR would occur even if the project was not implemented.
4. Identify project alternatives to both avoid resource impacts and minimize risks to the project	Implementation of the Updated Project would not exacerbate existing or projected damage to the environment, including damage to existing structures and sensitive resources, due to projected SLR. Mitigation is not required.

Table 4.9-2. California Coastal Commission Sea Level Rise Policy Guidance

Steps for Addressing Sea Level Rise	Project Discussion
5. Finalize project design and submit permit application	As a standard practice, this step would be completed after the CEQA process is complete

Note: SLR = Sea Level Rise
Source: California Coastal Commission 2018

A SLR vulnerability assessment was completed for the Tenth Avenue Marine Terminal Planning District (San Diego Unified Port District 2019). Based on the assessment, this planning district is projected to withstand potential SLR inundation and temporary flooding from SLR during a 100- year storm event at 1.6 feet of projected SLR (anticipated in the year 2050). The higher elevation and existing shoreline armoring are expected to protect many of the land uses in Planning District 4 from substantial projected SLR impacts. However, the coastal dependent uses in the planning district are sensitive to potential inundation. Several project components, including areas where quay wall revetment and pile/pier repairs or replacement would occur, may be affected by mean SLR during the useful design life (i.e., 50 years) of the various project elements. However, these project elements are intended to protect the shoreline and improve SLR resiliency through addressing existing revetment failures and structural pile deficiencies. In addition, these project elements would not substantially increase in-water fill volumes and, therefore, would not have potential to impede or redirect flood flows. Furthermore, this type of inundation would occur with or without the Updated Project. Consequently, the Updated Project is not anticipated to exacerbate existing or projected damage to the environment due to SLR. Thus, the Updated Project would be consistent with CCC Sea Level Rise Policy Guidance (2018).

California Public Trust Doctrine

The California State Lands Commission oversees all tide and submerged lands, navigable rivers, sloughs, and other public lands or waters (collectively, Tidelands) for consistency with the Public Trust Doctrine and grants given to trustees of Tidelands. The Public Trust Doctrine restricts the type of land uses allowed on these lands, which include commerce, navigation, fisheries, open space, water-oriented recreation, ecological habitat protection, or other recognized Public Trust purposes. The project site includes land subject to the California Public Trust Doctrine.

The District complies with the Port Act, which was enacted by the California Legislature and is consistent with the California Public Trust Doctrine. The Updated Project complies with Section 87.(a)(1) of the Port Act, which allows for the establishment, improvement, and conduct of a harbor, and for the construction, reconstruction, repair, maintenance, and operation of wharves, docks, piers, slips, quays, and all other works, buildings, facilities, utilities, structures, and appliances incidental, necessary, or convenient, for the promotion and accommodation of commerce and navigation. Consequently, the Updated Project would be consistent with the California Public Trust Doctrine.

San Diego Unified Port District PMP

The San Diego Unified Port District Act (Port Act), adopted in 1962, gives the District authority for the development, operation, maintenance, control, regulation, and management of the tidelands and lands underlying the navigable waters of San Diego Bay. The District PMP is the guiding land use policy document for all areas under the District's jurisdiction. The PMP was developed consistent with the Public Trust

Doctrine and in accordance with the provisions of the California Coastal Act. Under the PMP, the District has permitting authority and the ability to issue coastal development permits.

The Updated Project's site continues to be within Planning District 4 (Tenth Avenue Marine Terminal) of the PMP, Belt Street Industrial Subarea. Planning District 4 is the only area in the entire San Diego region with an established waterfront industrial shipping operation. The project site is in the Harbor Drive Industrial Subdistrict of Planning District 4, which is dedicated for shipbuilding and ship repair for the defense and maritime industries. PMP land and water use designations within the project site include Marine Related Industrial and Specialized Berthing, which are described in more detail as follows (San Diego Unified Port District 2017):

(4) Marine Related Industrial: Landside designation for sites within close proximity to water bodies due to functional dependencies on the industrial activity for direct access or for linkages to waterborne products, processes, raw materials, or large volumes of water. The primary users of marine-related industrial areas are dependent upon large ships, deep water, and specialized loading and unloading facilities, typically associated with shipbuilding and repair, processing plants, and marine terminal operations.

(5) Specialized Berthing: Waterside designation devoted to marine commercial and industrial uses including ship building and repair, water taxi, excursion and ferry craft, commercial fishing boat berthing as a priority use, cruise ship berthing, maritime museum exhibits and historic craft replicas, water intake and discharge, industrial and commercial launching, vessel loading and unloading, marine contractors, rigged vessels, barges, tugs/tow boats, breakwater, launch ramps and lifts, seawall margin wharves, and any other facility supporting the marine craft engaged in commercial and industrial uses.

The Updated Project would remain consistent with these land and water use designations. The Updated Project involves the removal and replacement of a portion of Pier 4, the removal of several deteriorating piers and the repair of an existing quay wall within the existing HII leasehold. According to the existing certified PMP, the Marine Related Industrial land use designation typically supports deep water and specialized loading and unloading facilities associated with shipbuilding and repair. The Specialized Berthing water use designation supports numerous marine commercial and industrial uses, one of which is ship building and repair (District 2017). As discussed in Section 2.2.4, the Updated Project would not result in not result changes to the facility operations and thus would not result in the change of the used on the project site. Rather, the Updated Project would improve the safety and structural integrity of existing pier facilities and associated infrastructure to support the existing water-dependent maritime industrial operations at the project site. These improvements would ensure the continued use of the project site for its designated uses. All project improvements would be contained within the HII leasehold and would not involve acquisition of adjacent parcels. Therefore, the Updated Project would be consistent with the with the existing land and water use designations. In addition, the Precise Plan for PMP Planning District 4 calls for the continued operation of the existing marine related industries, including general ship and boat building and repairing, within the Belt Street Industrial Subarea (District 2017). For reasons mentioned above, the Updated Project would be consistent with the Precise Plan and the PMP.

The project site includes water-dependent maritime industrial operations and is not accessible to the public. Thus, the Updated Project would not affect coastal access because it would not decrease the availability of existing parking or alter existing public views, public waterfront access, or water-oriented recreational activities.

Goals in the PMP that are applicable to the Updated Project are covered in Table 4.9-3, Updated Project's Consistency with San Diego Unified Port District's Port Master Plan.

Table 4.9-3. Updated Project's Consistency with San Diego Unified Port District's Port Master Plan

Port Master Plan Policy or Goal	Updated Project Consistency
Port Master Plan Goals	
Goal I: Provide for the present use and enjoyment of the bay and tidelands in such a way as to maintain options and opportunities for future use and enjoyment.	Consistent. The Updated Project would rehabilitate and restore an existing shipyard, which is a high priority, coastal-dependent maritime use.
Goal II: The Port District, as trustee for the people of the State of California, will administer the Tidelands so as to provide the greatest economic, social, and aesthetic benefits to present and future generations.	Consistent. The Updated Project would rehabilitate and restore an existing shipyard, which would ensure job creation and financial opportunities to the region.
Goal III: The Port District will assume leadership and initiative in determining and regulating the use of the bay and tidelands. ▪ Encourage industry and employment generating activities which will enhance the diversity and stability of the economic base. ▪ Encourage private enterprise to operate those necessary activities with both high and low margins of economic return.	Consistent. The Updated Project would rehabilitate and restore an existing shipyard, which would encourage the shipbuilding industry, generate employment opportunities and help stabilize the economic base.
Goal IV: The Port District, in recognition of the possibility that its actions may inadvertently tend to subsidize or enhance certain other activities, will emphasize the general welfare of statewide considerations over more local ones and public benefits over private ones. ▪ Develop the multiple purpose use of the tidelands for the benefit of all the people while giving due consideration to the facts and circumstances related to the development of tideland and port facilities. ▪ Foster and encourage the development of commerce, navigation, fisheries, and recreation by the expenditure of public monies for the preservation of lands in their natural state, the reclamation of tidelands, the construction of facilities, and the promotion of its use. ▪ Encourage non-exclusory uses on tidelands.	Consistent. The Updated Project would rehabilitate, enhance and restore an existing shipyard, which is a maritime use of statewide importance. The Updated Project would enhance ship building/repair services that contribute to navigation and military safety of the area.
Goal V: The Port District will take particular interest in and exercise extra caution in those uses or	Consistent. The Updated Project does not propose fill or dredging and has an existing long-term lease for a coastal-dependent shipyard use. The project

Table 4.9-3. Updated Project's Consistency with San Diego Unified Port District's Port Master Plan

Port Master Plan Policy or Goal	Updated Project Consistency
modifications of the Bay and Tidelands, which constitute irreversible action of loss of control ▪ Bay fills, dredging and the granting of long-term leases will be taken only when substantial public benefit is derived.	would allow for the continuation of this use that derives substantial public benefit.
Goal VII: The Port District will remain sensitive to needs, and cooperate with adjacent communities and other appropriate governmental agencies in Bay and Tideland development. ▪ The Port District will attempt to avoid disproportionate impact on adjacent jurisdictions both in benefits and any possible liabilities, which might accrue through bay and tideland activities.	Consistent. The Updated Project would be located in an industrial waterfront adjacent to the Bay. East Harbor Drive runs parallel to the waterfront and access to the project site is provided by East Belt Street. No changes are proposed to the configuration of East Harbor Drive or East Belt Street under the Updated Project. Also, operation of the Updated Project would not result in an increase in the number of permanent employees at the project site or increase the need for parking in the area; therefore, nearby City of San Diego intersections, roadways and parking areas would not be impacted. Sufficient parking is provided in the existing parking lots to accommodate the 5 construction workers that would be visiting the site each day during the construction phase. There would be a negligible increase in haul trips to handle the disposal of rubble and piers/piles at the Otay Mesa Landfill; however, the minimal increase in trips would not constitute a significant impact to the capacity of the existing circulation system. Weekly haul truck round trips for construction material delivery and rubble/material disposal would be required, but this increase would not constitute more severe impacts to the capacity of the existing circulation system. Also, the minimal project construction traffic from the Updated Project would not interfere with or decrease the performance of public transit, bicycle, or pedestrian facilities located in adjacent jurisdictions surrounding the project site.
Goal VIII: The Port District will enhance and maintain the bay and tidelands as an attractive physical and biological entity. ▪ Each activity, development and construction should be designed to best facilitate its particular function, which function should be integrated with and related to the site and surroundings of that activity. ▪ Views should be enhanced through view corridors, the preservation of panoramas, accentuation of vistas, and shielding of the incongruous and inconsistent.	Consistent. The Updated Project would be located in an industrial working waterfront area adjacent to the Bay. East Harbor Drive runs parallel to the waterfront and access to the project site is provided by East Belt Street. No changes are proposed to the configuration of East Harbor Drive or East Belt Street under the Updated Project. Views would not be impacted by the Updated Project as explained in Section 4.1.3, Aesthetics Impacts Analysis and the proposed removal of deteriorating piers would improve the views from the Coronado Bridge and others. The Updated Project would also not impede

Table 4.9-3. Updated Project's Consistency with San Diego Unified Port District's Port Master Plan

Port Master Plan Policy or Goal	Updated Project Consistency
▪ Establish guidelines and standards facilitating the retention and development of an aesthetically pleasing tideland environment free of noxious odors, excessive noise, and hazards to the health and welfare of the people of California.	the Port's ability to establish guidelines and standards facilitating the retention and development of an aesthetically pleasing tideland environment, and the project would be designed to not emit noxious odors, excessive noise, and hazards to the health and welfare of the people of California.
Goal X: The quality of water in San Diego Bay will be maintained at such a level as will permit human water contact activities. ▪ Ensure through lease agreements that Port District tenants do not contribute to water pollution. ▪ Cooperate with the Regional Water Quality Control Board, the County Health Department, and other public agencies in a continual program of monitoring water quality and identifying the source of any pollutant. ▪ Adopt ordinances, and take other legal and remedial action to eliminate sources of pollution.	Consistent. As discussed in Section 4.8.3, Hydrology and Water Quality Analysis, implementation of mitigation measures HAZ-1 through HAZ-7, would be implemented by the Updated Project to ensure the project contains hazardous materials on the site and minimizes their release into the Bay. The Updated Project would also utilize a fully contained stormwater diversion system that is effective up to a one-inch per hour storm event. The diversion system would capture, treat, and dispose of runoff water in the City's municipal sewer system. The portion of Pier 4 that would be replaced would also include systems to capture and redirect stormwater to the existing stormwater diversion system. The existing stormwater diversion system would continue to limit discharge from the project site into the Bay during construction and operation of the Updated Project. In addition, to avoid discharging leached creosote into the Bay when removing piles, the Updated Project would also be required to implement mitigation measure HAZ-8, which would involve placing the removed piles in within containment walls or "skip tubs" while they are temporarily stored on the barge prior to off-site transport and disposal at a licensed waste disposal site, which would accept the creosote-treated logs. Additionally, as described in Section 4.8.3, a series of the construction-related BMPs would be implemented to minimize impacts from the Updated Project into the surrounding environment. The pile removal and improvement process would disturb and stir up sea-floor sediment which has been found to contain contaminants of concern. Mitigation measure BIO-3, outlined in Section 4.3.3, Biological Resources Impacts Analysis would be required during construction of the Updated Project to limit the spread of sediment in the water column. Additionally, construction of the Updated Project, would be done in accordance with the San Diego Bay Watershed Management Area WQIP and Regional MS4 Permit (Order No. R9-2013-0001, as

Table 4.9-3. Updated Project's Consistency with San Diego Unified Port District's Port Master Plan

Port Master Plan Policy or Goal	Updated Project Consistency
	amended by Order No. R9- 2 015-0001 and R9-2015-0100) since the Updated Project would be dealing with water quality and using an existing stormwater diversion system to redirect storm water to the City's municipal sanitary sewer system. Lastly, the Updated Project would include implementation of mitigation measure HAZ-10, which would require the Project Applicant to carry out appropriate remediation measures if the Updated Project's pile removal and driving activities cause a substantial amount of contaminated sediment to be present within the Bay. With the use of the existing on-site stormwater diversion system and implementation of mitigation measures HAZ-1 through HAZ-8, and HAZ-10, included in the 2019 Final MND, the Updated Project would not result in new or more severe significant impacts to water quality.
Goal XI: The Port will protect, preserve, and enhance natural resources, including natural plant and animal life in the Bay as a desirable amenity, an ecological necessity, and a valuable and usable resource. ▪ Identify existing and potential assets. ▪ Keep appraised of the growing body of knowledge on ecological balance and interrelationships. ▪ Administer the natural resources so that impacts upon natural resource values remain compatible with the preservation requirements of the public trust.	Consistent. The Updated Project would not impede the Port's ability to protect, preserve and enhance natural resources, including natural plant and animal life in the Bay. The project would be designed to minimize impacts to natural resources.
The PMP specifies that industrial activities on tidelands should meet the following objectives and criteria, which are applicable to the project:	
Be located in convenient proximity to other industrial areas and to living areas from which there are interconnecting transit and thoroughfare routes.	Consistent. The Updated Project site is located in an industrial waterfront adjacent to the Bay. East Harbor Drive runs parallel to the waterfront and access to the project site is provided by East Belt Street. No changes are proposed to the configuration of East Harbor Drive or East Belt Street under the Updated Project. Also, operation of the Updated Project would not result in an increase in the number of permanent employees at the project site. Because the increased number of vehicles traveling to the project site on a daily basis would not change during operations, nearby intersections and roadways would not be impacted. The construction of the Updated Project would require up to five workers per day, and sufficient parking for the construction workers and all construction related equipment is available. There would also be a slight increase in haul trips to

Table 4.9-3. Updated Project's Consistency with San Diego Unified Port District's Port Master Plan

Port Master Plan Policy or Goal	Updated Project Consistency
	handle the disposal of rubble and piers/piles at the Otay Mesa Landfill; however, the minimal increase in trips would not constitute a significant impact to the capacity of the existing circulation system. The weekly haul truck round trips for construction material delivery and rubble/material disposal would be required, but this increase would not constitute more severe impacts to the capacity of the existing circulation system.
Provide sites that are economical to develop and adequate for main buildings, accessory storage, off-street loading, off-street parking, and buffer strips.	Consistent. The Updated Project is at an operating shipyard project site that provides these elements.
Be designed to meet performance standards adequate to avoid nuisances, thereby insuring compatibility with surrounding uses.	Consistent. The Updated Project site would be located in an operating shipyard in the industrial waterfront adjacent to the Bay along East Belt Street, which is the Working Port are of Precise Plan 4 in the PMP. Planning District 4 is the only area in the entire San Diego region with an established waterfront industrial shipping operation and the precise plan calls for the continued operation of the existing marine related industries, including general ship and boat building and repairing, within the Belt Street Industrial Subarea (District 2017). The Updated Project would be consistent with the Precise Plan and compatible with surrounding uses. Also, the Updated Project would not result in an increase in operations; nor would it result in any additional employees, other than those needed during construction. Therefore, the Updated Project would not result in any new or more significant nuisances due to incompatible land uses.
Be limited to industrial uses which have a definite need for the availability of utilities, direct access to railroads and major thoroughfares, and the proximity of either airport or water frontage.	Consistent. The Updated Project would optimize existing maritime infrastructure for a water-dependent shipyard in the Working Port. This industrial use has a definite need for proximity to the water's frontage.
Provide substantial benefits to both local economic needs and to the regional hinterland.	Consistent. The Updated Project would enhance, repair and rehabilitate an existing/operating shipyard use, which is a part of the region's economy and the working waterfront. The shipyard would contribute to job generation, long-term financial sustainability and the viability of the region.

Therefore, the project would be consistent with the goals, policies, and objectives outlined in the PMP, which were developed in accordance with the requirements of the Coastal Zone Management Act, California Coastal Act, and Public Trust Doctrine.

INRMP

As discussed above in Section 4.3, Biological Resources, and in the 2019 Final MND, the project is subject to the Bay INRMP. Implementation of mitigation measures BIO-1, BIO-2, BIO-3, and BIO-4, outlined in the 2019 Final MND, would still be required for the Updated Project and would ensure that the project would not impede implementation of conflict with the INRMP.

NASNI ALUCP

The newly adopted Naval Station North Island ALUCP shows the project site as being located in the AIA for the NASNI ALUCP (NASNI ALUCP 2020). The Updated Project would be exempt from ALUC review because per Table 3.3 – Exemptions from Airport Land Use Compatibility Review of the NASNI ALUCP, the project qualifies as an alteration to an existing nonresidential use. The NASNI ALUCP also shows the project site as being located outside of a Clear Zone, Accident Potential Zone, mapped safety zones and mapped noise contours. Therefore, like the Original Project, the Updated Project would not have any impacts related to aircraft safety hazards or excessive noise within a land use plan. According to the NASNI ALUCP, all projects that are located outside of the noise and safety zones, but within the AIA, require review by the FAA or the equivalent. Thus, the Updated Project would be conditioned to either have the FAA conduct an aeronautical study of the Updated Project, and to obtain a Determination of No Hazard to Air Navigation for the construction and operation of the Updated Project, or to obtain certification by a licensed professional that there is no need to file a notice for construction or alteration per Title 14 Code of Federal Regulations § 77.9(e)(1). Thus, the Updated Project would be consistent with the goals, policies, and objectives outlined in the NASNI ALUCP and would not result in any new or more severe significant impacts related to land use consistency within the NASNI ALUCP.

Conclusions

The Updated Project would not result in not result changes to the facility operations and thus would not result in the change of the use of the project site. Therefore, the Updated Project would be consistent with the with the existing land and water use designations under the PMP. In addition, the Precise Plan for PMP Planning District 4 calls for the continued operation of the existing marine related industries, including general ship and boat building and repairing, within the Belt Street Industrial Subarea (District 2017). For reasons mentioned above, the Updated Project would be consistent with the Precise Plan. The Updated Project would not result in an increase in operations; nor would it result in any additional employees, other than those needed during construction. As discussed above and in the 2019 Final MND, the project is subject to the Bay INRMP. Implementation of mitigation measures BIO-1, BIO-2, BIO-3, and BIO-4, outlined in the 2019 Final MND, would ensure that the project would not impede implementation of conflict with the INRMP. Therefore, the Updated Project would not result in any new or more significant impacts related to land use and planning.

Applicable Mitigation Measures from the 2019 Final MND

The applicable mitigation measures from the 2019 Final MND are presented in the Biological Resources section, above.

MM-BIO-1, MM-BIO-2, MM-BIO-3 and MM-BIO-4 (see above)

4.10 Noise

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
X. NOISE			
Would the project:			
a) 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?	No	No	No
b) Generation of excessive groundborne vibration or groundborne noise levels?	No	No	No
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	No	No	No
d) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	No	No	No
e) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No	Yes	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project, as they relate to noise and vibration; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted.

4.10.1 Summary of 2019 Final MND

The 2019 Final MND identified a potentially significant impact regarding substantial temporary or periodic increases in ambient noise levels in the project vicinity, which could cause adverse impacts to the surrounding wildlife, including the California least tern, California brown pelican, and the Pacific green sea turtle, and marine mammals. In addition, noise generated from the pile driving activities would have potentially impacted sensitive in-water marine species. Implementation of mitigation measure BIO-1, Construction Monitoring for Sensitive Species, was found to reduce noise impacts to wildlife to less than significant. In addition, mitigation measure BIO-2, Soft-start Sequencing of Pile Driving Activities, was found to reduce noise impacts to marine fish that could be significantly impacted by noise generated during pile driving activities by giving five species of fish an opportunity to leave the area. This mitigation measure would have reduced impacts to fish to a level less than significant.

In addition, the 2019 Final MND found that the Original Project would have potentially significant impacts regarding exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. As discussed earlier, vibration resulting from pile driving and subsequent ground-shaking could impact the Pacific green sea turtle, California least tern, marine mammals, and several types of fish. Implementation of mitigation measures BIO-1 and BIO-2 would also have reduced potential vibration impacts to marine species to a level less than significant. The 2019 Final MND found that the groundborne pile driving would not substantially impact humans in the immediate vicinity as pile driving activities would become imperceptible after 25 to 50 feet.

Upon completion of Original Project's construction, the 2019 Final MND found that there would not be an increase in ambient noise levels in the project vicinity above levels existing without the project. The existing ambient noise levels were estimated to be around 56.6 dBA L_{EQ}, and the 2019 Final MND found that the operation of the completed Original Project would also be around 56.6 dBA L_{EQ}. The project site is not located within the vicinity of an airstrip, and the site is located outside of the 60 CNEL contours mapped in the San Diego International Airport's ALUCP; therefore, the Original Project would not be exposing people residing or working in the area to excessive noise levels and impacts would be less than significant.

There would be a substantial temporary increase in ambient noise levels in the project vicinity above levels existing without the Original Project, resulting from construction and use of equipment such as pile drivers, vibratory pile drivers, barges, and cranes. The Original Project would be required to comply with the City's Noise Abatement and Control Ordinance (Section 59.5.0404), which states that construction cannot occur between the hours of 7:00 PM to 7:00 AM on any day. Although there would be temporary elevated noise levels during construction, construction activities would take place between 7:00 AM and 4:00 PM and would not occur in the vicinity of residential properties. Therefore, the Original Project would comply with the City's Noise Abatement and Control Ordinance and impacts would be less than significant.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. The Updated Project would involve improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall. Construction of the project would occur in two phases over a 4-year period and would take place between the hours of 7:00 AM and 4:00 PM. Construction would also involve pile driving that could result in noise and vibration impacts to wildlife. No other changes to the Original Project that relate to noise and vibration are proposed.

4.10.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

The Airport Land Use Commission for San Diego County adopted a new ALUCP for NASNI on October 1, 2020; therefore, the Updated Project will be subject to the noise policies of the newly adopted NASNI ALUCP. An evaluation of the Updated Project's consistency with the NASNI ALUCP noise policies is provided below in the Impact Analysis section. No other changes in circumstances related to noise and vibration have been identified since the 2019 Final MND was certified. No other new information, which was not known and could not have been known with the exercise of reasonable due diligence at the time the 2019 Final MND was certified as complete, related to noise and vibration have been identified during the preparation of this checklist.

4.10.3 Impact Analysis

Would the project:

a) ***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

As discussed in the 2019 Final MND, the majority of construction for the Updated Project would occur within or over the Bay and impacts related to noise and vibration would generally be limited to in-water impacts to marine life. The 2019 Final MND analyzed potential noise impacts associated with pile driving activities on wildlife using impulsive and non-impulsive thresholds developed by National Oceanic and Atmospheric Administration (NOAA) for Level A effects to marine mammals based on marine mammal hearing groups, which are divided into low-frequency cetaceans (baleen whales), mid-frequency cetaceans (dolphins), high-frequency cetaceans (true porpoises), phocid pinnipeds (seals), and otariid pinnipeds (sea lions). Caltrans, the Federal Highway Administration, CDFW, USFWS, and NOAA Fisheries have adopted noise thresholds for fish harm and mortality from pile driving. Physical injury for all fishes can occur if peak sound levels are above 206 decibels (dB) or if cumulative sound exposure levels exceed 187 dB for fish greater than or equal to two grams or 183 dB for fish less than two grams. Based on analysis provided in the 2019 Final MND and as discussed above, noise associated with construction of the Original Project could result in indirect impacts to wildlife, including the sensitive wildlife that could occur at the site during construction. However, implementation of mitigation measure BIO-1, Construction Monitoring, would reduce noise impacts to wildlife, including dolphins, sea lions, and seals to less than significant. Mitigation measure BIO-2, Soft-State Sequencing of Pile Driving Activities, would be implemented to provide five fish an opportunity to leave the area and would reduce impacts to fish to a level less than significant.

The Updated Project would involve improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; and reinforcement of the existing quay wall on the same Project site analyzed in the 2019 Final MND. The Updated Project's components would involve similar types of construction equipment used and result in similar noise levels to the project evaluated in the 2019 Final MND. While the Updated Project may generate some additional noise during the rehabilitation of the existing concrete rubble quay wall, the project would also generate less noise from pile driving because fewer piles would be driven as deteriorated

piers would be removed and not replaced. Also, like the Original Project, the Updated Project would incorporate the same noise disturbance BMPs that would require the contractor to use the vibratory hammer to the maximum extent possible. The contractor would limit the use of impact hammers as much as possible to minimize noise disturbance. When an impact hammer is necessary, noise dampening techniques (including the use of a nylon or wooden block between the impact hammer and piles, use of the slow-start method, and use of the smallest feasible hammer) would be employed to dampen underwater noise. In addition, the Updated Project would still require mitigation measures BIO-1 and BIO-2 to reduce impacts on wildlife associated with noise.

Lastly, like the Original Project, the Updated Project would not be located in the vicinity of existing residences or sensitive receptors and would be required to comply with the City's Noise Abatement and Control Ordinance (Section 59.5.0404), which states that construction cannot occur between the hours of 7:00 PM to 7:00 AM on any day. Although there would be temporary elevated noise levels during construction, construction activities would take place between 7:00 AM and 4:00 PM and would not occur in the vicinity of residential properties. Therefore, with implementation of mitigation measures BIO-1 and BIO-2, the Updated Project would not expose persons or nearby land uses to significant increases in ambient noise levels and would not result in any new or more severe significant impacts related to increases in ambient noise levels.

b) Generation of excessive groundborne vibration or groundborne noise levels?

As discussed above and in the 2019 Final MND, vibration resulting from pile driving and subsequent ground-shaking in the Original Project could impact the Pacific green sea turtle, California least tern, marine mammals, and several types of fish. The 2019 Final MND found that the implementation of mitigation measures BIO-1 and BIO-2 would also reduce potential vibration impacts to marine species to a less-than-significant level. The 2019 Final MND also found that the groundborne pile driving would not substantially impact humans in the immediate vicinity as pile driving activities would become imperceptible after 25 to 50 feet. The Updated Project would involve similar types of construction equipment as the Original Project evaluated in the 2019 Final MND and would also involve pile driving, but to a lesser extent because fewer piles would be driven in the Updated Project. Therefore, mitigation measures BIO-1 and BIO-2 would still be required to reduce impacts to less than significant, but the Updated Project would not result in any new significant impacts related to groundborne noise or vibration than what was analyzed in the 2019 Final MND.

c) Result in substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

One noise sensitive land use, Cesar Chavez Park, is located near the project site. The 2019 Final MND estimated existing ambient noise levels to be about 56.6 dBA L_{eq} as a result of vehicular traffic, rail, and industrial sources. Similar to the Original Project, upon completion of the Updated Project's construction activities, existing operations at the project site would resume and permanent noise levels would remain around 56.6 dBA L_{EQ}. Therefore, the Updated Project would not result in a substantial permanent increase in ambient noise levels above existing conditions at Cesar Chavez Park or other areas surrounding the project site. Thus, the Updated Project would not cause any new or more severe impacts related to ambient noise levels beyond what was found for the Original Project in the 2019 Final MND.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

As discussed under Threshold a, pile driving activities associated with the Updated Project would result in temporary increases in underwater noise levels that would have the potential to affect marine mammals and fishes similar to the Original Project. The Updated Project would implement the same mitigation measures identified in the 2019 Final MND, BIO-1 and BIO-2, which would ensure biological monitoring and a soft-start sequence to pile driving would occur. Thus, with the implementation of this mitigation, no new or more severe noise impacts would occur to marine mammals or fish than that analyzed for the Original Project in the 2019 Final MND.

For temporary noise impacts to Cesar Chavez Park, Section 59.5.0404 of the City's Noise Abatement and Control Ordinance would also apply to the Updated Project's construction because the District has not adopted such an ordinance. Section 59.5.0404 of the City's Noise Abatement and Control Ordinance states that:

a) It shall be unlawful for any person, between the hours of 7:00 PM of any day and 7:00 AM of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise.
b) It shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7:00 AM to7:00PM.

The Updated Project's construction would involve pile extraction and replacement similar to the Original Project's construction, which would utilize an impact pile driver, vibratory pile, barge, and crane. Construction activities would occur from the barge on the water or equipment on land. The barge and construction equipment would be at variable locations depending on the structure under construction at a given time and could occur as close as 100 feet from Cesar Chavez Park. Thus, like the Original Project, the Updated Project's construction would cause a temporary increase in ambient noise levels at Cesar Chavez Park.

The 2019 Final MND found that Cesar Chavez Park is subject to an existing ambient noise level of 56.6 dBA L_{EQ} primarily from traffic, rail, and industrial sources. During the Updated Project's construction, the simultaneous use of an impact pile driver, barge, crane and other construction equipment would generate the highest noise levels. The 2019 Final MND found that at a distance of 100 feet, an impact pile driver, barge, and crane would generate a noise level of 94 dBA L_{EQ} (Port of Los Angeles 2007). This noise level is a conservative estimate because most construction activity would take place at distances greater than 100 feet from Cesar Chavez Park, thereby allowing for noise attenuation and lower noise levels at the park. In addition, a noise levels would be lower when a vibratory hammer is used instead of an impact hammer.

Although the Updated Project would result in temporary elevated noise levels at Cesar Chavez Park during construction, construction activities would take place between 7:00 AM and 4:00 PM and would not occur in the vicinity of residential properties. Therefore, the project would be in compliance with the City's Noise Abatement and Control Ordinance, and impacts would not be more severe than those analyzed for the Original Project in the 2019 Final MND.

e) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

As discussed above and in the 2019 Final MND, the Original Project is not located within the vicinity of an airstrip, and is located outside of the 60 CNEL contours mapped in the San Diego International Airport's ALUCP and outside of the mapped noise contours of the NASNI AICUZ Update; therefore, the Original Project would not have exposed people residing or working in the project area to excessive noise levels and impacts would have been less than significant and no mitigation measures or specific conditions were required. The Updated Project would be located within the same project site analyzed in the 2019 Final MND for the Original Project. The project site is 2.9 miles southeast of NASNI and would be located outside of the mapped noise contours associated the newly adopted 2020 NASNI ALUCP. Thus, the Updated Project would not result in any new or more severe significant impacts related to noise associated with an airport land use plan than what was analyzed in the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

The applicable mitigation measures from the 2019 Final MND are presented in the Biological Resources section, above.

MM-BIO-1 and MM-BIO-2 (see above)

4.11 Transportation

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
XI. TRANSPORTATION AND TRAFFIC			
Would the project:			
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	No	No	No
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No	No	No
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	No	No	No
d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections or incompatible uses (e.g., farm equipment?)	No	No	No
e) Result in inadequate emergency access?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project, as they relate to transportation; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted.

4.11.1 Summary of 2019 Final MND

The 2019 Final MND did not identify any potentially significant impacts regarding transportation. The 2019 Final MND found that most of the traffic from the Original Project would be a result of project construction activities. Existing operation of the Original Project site would resume following completion of construction, thus there would be no long-term increase in on-road traffic and boat traffic under the Original Project.

The Original Project was also found to have less than significant impacts to applicable congestion management programs and no impacts to air traffic patterns, emergency access or increasing hazards due to a design feature. No mitigation measures or specific conditions were required for traffic or transportation.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. The Updated Project would involve improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; reinforcement of the existing quay wall and removal of rubble. Construction of the Updated Project would occur over a 4-year period with two phases and would take place between the hours of 7:00 AM and 4:00 PM. Construction would generate short term and temporary trips, like the Original Project.

4.11.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

The California Natural Resources Agency updated the CEQA Guidelines in 2018, and the updated guidelines became effective on December 28, 2018. With the updated guidelines, the thresholds related to a conflict with an applicable congestion management program and changes in air traffic patterns were removed from the CEQA Guidelines Appendix G checklist for transportation and a threshold related to consistency with CEQA Guidelines section 15064.3, subdivision (b) was added to the checklist. CEQA Guidelines Section 15064.3, establishes vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts. The checklist for transportation impacts in CEQA Guidelines Appendix G also was revised to reflect the change in methodology from level of service (LOS) or other measures of a project's effect on traffic congestion to VMT. However, a change in the methodology for evaluating potential impacts does not necessarily constitute "changed circumstances" or "new information" for purposes of additional environmental review under Public Resources Section 21166 where, as in this case, the type and amount of traffic that may result from the proposed changes in the project were previously studied in the MND, (see, e.g. Fort Mohave Indian tribe v. Department of Health Services (1995) 38 Cal App.4th 1574, 1606; *A Local & Regulatory Monitor v. City of Los Angeles* (1993) 12 Cal.App.4th 1773,1800-1803.) Nonetheless, for informational purposes, this section includes a quantitative estimate of construction trips and qualitative analysis of VMT based on the requirements of current CEQA guidelines and the State and City's guidelines for analysis of transportation impacts.

The Updated Project's construction traffic was estimated using the phasing and schedule estimated in the air quality analysis. Trip generation for workers and trucks is estimated for peak phase of construction which would occur

during the overall construction period. This peak construction phase was established based on applying a passenger car equivalent (PCE) conversion factor to truck trips. As shown in Table 4.11-1, the construction of the Updated Project would generate 10 daily workers trips which would occur during the AM and PM peak hour. There would be a maximum of 2 daily haul trips (on approximately one day per week) that would occur outside of the AM and PM peak hour. Applying the PCE conversion factor for trucks, the peak construction of the Updated Project would generate 16 total daily trips, 5 AM peak hour trips and 5 PM peak hour trips.

Table 4.11-1: Peak Phase Construction Trip Generation

Vehicle Type	Daily Quantity	Daily Trips[1]	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trip Generation								
Workers	5 workers	10	5	0	5	0	5	5
Haul Trucks	1 truck	2						
Total Trips		**12**	**5**	**0**	**5**	**0**	**5**	**5**
Trip Generation w PCE								
Workers (1.0 PCE)	5 workers	10	5	0	5	0	5	5
Haul Trucks (3.0 PCE)	1 truck	6	0	0	0	0	0	0
Total PCE Trips		**16**	**5**	**0**	**5**	**0**	**5**	**5**

Source: Air Quality Analysis, Dudek
Notes: PCE: Passenger Car Equivalent
[1] Daily trips are a total of all inbound and outbound trips and represent one-way trips per Air Quality analysis.

4.11.3 Impact Analysis

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Like the Original Project, the Updated Project site is located in an industrial waterfront adjacent to the Bay. East Harbor Drive runs parallel to the waterfront and access to the project site is provided by East Belt Street. Like the Original Project, no changes are proposed to the configuration of East Harbor Drive or East Belt Street. Also, like the Original Project, operation of the Updated Project would not result in an increase in the number of permanent employees at the project site. Because the increased number of vehicles traveling to the project site on a daily basis would not change during operations, nearby intersections would not be impacted.

The construction of the Updated Project would require up to five workers per day, and sufficient parking for the construction workers and all construction related equipment is available on site. Compared to the Original Project, there would be no increase in the amount of haul trips to handle construction material deliveries and the disposal of piers/piles and rubble (if needed) at the Otay Mesa Landfill (an average of 2 haul truck trips weekly over the course of the project's construction), The two weekly haul truck round trips for construction material delivery and rubble/material disposal would not result in new or more severe impacts to the capacity of the existing circulation system over what was analyzed for the Original Project in the 2019 Final MND.

Also, the minimal project construction traffic from the Updated Project would not interfere with or decrease the performance of public transit, bicycle, or pedestrian facilities located in the area surrounding the project site. The project site is an operating ship repair facility with restricted access. There are no public transit, bicycle, or pedestrian facilities located within the project site. The nearest public transit facility is the Barrio Logan Station, which accommodates the Metropolitan Transit System UC San Diego Blue Line. Because the number of construction workers would be limited to five per day and because the project would not increase the number of permanent workers, the Updated Project would not increase users of the Barrio Logan Station in a manner that would decrease the performance of the station. There are also no bicycle facilities in the vicinity of the project site under the Updated Project. Sidewalks are present along Cesar E. Chavez Parkway, but like the Original Project, the Updated Project would not result in closures of the sidewalk. Thus, the Updated Project would not decrease the performance of transit, bicycle, or pedestrian facilities and would therefore not conflict with programs, plans, ordinances or policies regarding these facilities; impacts would not be more severe than what was analyzed in the 2019 Addendum.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Construction

CEQA Guidelines Section 15064.3(b) focuses on the currently adopted VMT metric for determining the significance of transportation impacts. The passage of SB 743 required the focus of transportation analysis change from LOS or vehicle delay to VMT. The Transportation Study Manual (TSM) (City of San Diego 2020a) establishes the guidelines and methodology for assessing transportation impacts for land use and transportation projects based on the updated CEQA guidelines. The Updated Project is located in the City of San Diego. Therefore, the following assessment is based on the City's TSM as well as substantiated by OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018).

VMT is defined as "the amount and distance of automobile travel attributable to a project." "Automobile" refers to on-road passenger vehicles, specifically cars and light trucks. The OPR has clarified in its Technical Advisory (OPR 2018) that heavy-duty truck VMT is not required to be included in the estimation of a project's VMT. Other relevant considerations may include the effects of a project on transit and non-motorized traveled.

The anticipated construction traffic generated by the Updated Project would be categorized under subdivision (b)(3), qualitative analysis. For permanent operation, the City of San Diego recommends that any project generating 300 or less average daily trips may be presumed to have a less than significant impact and therefore be screening from a detailed VMT analysis. The Technical Advisory recommends that any project generating 110 or less average daily trips may be presumed to have a less than significant impact.

The OPR's Technical Advisory and the City's TSM guidelines recommend a threshold of significance for land use development (residential, office, industrial, small projects, and other land uses) and transportation projects. It should be noted that there is no significance threshold for construction projects or the construction phase of any project. The construction of the Updated Project would generate relatively low number of temporary construction-related trips (see Tables 4.11-1), which reflects trips during the peak phase of construction and includes heavy-duty truck trips although such trips have been excluded from VMT analysis by the OPR. The increase in VMT associated with projects' construction would be temporary and would not cause a significant VMT impact in accordance with the City's TSM guidelines and OPR's guidance.

Operation

The Updated Project's operation is anticipated to entail same operational characteristics as the existing facilities. There would not be new permanent staff, but may be staff that conducts routine inspections, maintenance, and repairs as required. This would result in relatively minimal new daily personnel and truck trips related to operation of the Updated Project. Therefore, the operation of the Updated Project can be screened out given that it would not generate 110 daily trips or more and would therefore be presumed to have a less than significant VMT impact.

Therefore, the construction and operation of the Updated Project would not result in VMT exceeding thresholds and impacts related to inconsistency with CEQA Guidelines § 15064.3, subdivision (b). would be less than significant.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Like the Original Project, the Updated Project would not increase the height of the existing structures and would not result in a change in air traffic patterns; therefore, no would be no new or more severe impacts to air traffic patterns than what was analyzed for the Original Project in the 2019 Final MND.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Like the Original Project, the Updated Project does not involve any design modification to existing street segments or intersections and would not change driveway configurations. The Updated Project would replace and improve existing infrastructure within an existing ship repair yard. The project site would continue to operate as a ship repair yard upon project completion and is situated in an area consisting predominantly of industrial and maritime uses. Therefore, the Updated Project is compatible with surrounding land uses, and does not have the potential to increase traffic hazards to motorists or create incompatible traffic related use. Thus, no new or more severe impacts related to design feature hazards or incompatible uses would be created beyond what was analyzed for the Original Project in the 2019 Final MND.

e) Result in inadequate emergency access?

The Updated Project would involve short-term construction and would not affect truck operations long-term. Construction of the Updated Project would only require two new haul truck trips per week on average and would not require additional parking for construction workers. The Updated Project would also not result in an increase in the number of permanent employees at the project site. Thus. The Updated Project would not impact the capacity of the existing circulation system or interfere with any plans, policies or programs related to emergency access. The Updated Project would not involve any design modification to existing street segment or intersection or change any driveway configurations. Therefore, there would not be any change to emergency access to the project site. Additionally, the Updated Project would not result in temporary closures of public roadways or driveways within City or District jurisdiction. The project site would remain accessible by water from the Bay and from East Harbor Drive. Adequate controlled site access, as outlined in the project site-specific Emergency Access Plan in the 2019 Final MND, would be maintained during and after construction of the Updated Project. Therefore, impacts to emergency access would not be more severe than what was analyzed in the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

There are no mitigation measures or specific conditions from the 2019 Final MND identified to reduce impacts related to transportation.

4.12 Utilities and Service Systems

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
XII. UTILITIES AND SERVICE SYSTEMS			
Would the project:			
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant effects?	No	No	No
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No	No	No
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitment?	No	No	No
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	No	No	No
e) Comply with federal, state, and local statutes and regulations related to solid waste?	No	No	No

The following impact analysis includes an overview of what was analyzed in the 2019 Final MND; a summary of changes to the Original Project, as they relate to utilities and service systems; and a summary of changes in circumstances or new information which was not known and could not have been known at the time the 2019 Final MND was adopted.

4.12.1 Summary of 2019 Final MND

The 2019 Final MND did not identify potentially significant impacts on utilities and services systems. The 2019 Final MND found there would be no impacts to storm water drainage facilities, water or wastewater supplies, or water or wastewater treatment facilities.

Regarding solid waste, the 2019 Final MND found that the Original Project would have had no net increase in operational workers and would have had five construction workers present on-site daily during construction, which would generate a negligible amount of solid waste. The 2019 Final MND also found that the solid waste generated would have been associated with the piles being removed during construction. Disposal of the piles would have complied with all federal, state and local statues and regulations related to solid waste and would have been disposed of at the Otay Landfill. According to the 2019 Final MND, the Otay Landfill had a sufficient remaining capacity to be able to accommodate the Original Project's solid waste disposal needs. As such, the Original Project would not generate a substantial amount of solid waste during either construction or operation and would not require the construction of any new landfill facilities. No mitigation measures were required in the 2019 Final MND.

Changes to the Original Project

A summary of the changes to the Original Project evaluated in the 2019 Final MND is provided in Table 3-1. The Updated Project would involve improvement of a portion of Pier 4/Wharf 4; removal of deteriorated Piers 1, 5 and 7; reinforcement of the existing quay wall and removal of rubble. Similar to the Original Project, solid waste generated during the Updated Project's construction would be associated with the removal of piles associated with Piers 1, 4, 5 and 7; however, the Updated Project would require the removal of approximately 20 to 25 tons of rubble from the intertidal area along the quay wall between Wharf 2 and Pier 4. Some of this rubble would be repurposed on site, while the rest would be disposed in accordance with federal, state and local statues and regulations related to solid waste at the Otay Landfill.

4.12.2 Changes in Circumstances or New Information Which Was Not Known and Could Not Have Been Known

No changes in circumstances or new information related to utilities and service systems, which were not known and could not have been known with the exercise of reasonable due diligence at the time the 2019 Final MND was adopted, have been identified during the preparation of this checklist.

4.12.3 Impact Analysis

Would the project:

a) ***Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

Like the Original Project, the Updated Project would have five construction workers present on-site during the construction period. Upon completion of the Updated Project, there would be no net increase in operations or operational capacity. Thus, the Updated Project would generate a negligible increase in the

use of water, electric power, natural gas or telecommunications and the generation of wastewater. compared to existing conditions. Like the Original Project, the City of San Diego wastewater system would be able to effectively treat wastewater generated by the Updated Project. As such, construction and operation of the Updated Project would have no impact on these systems and the relocation or construction of new or expanded facilities would be required. Similar to the Original Project, the Updated Project would utilize a fully contained stormwater diversion system that is effective up to a one-inch per hour storm event. The diversion system would capture, treat, and dispose of runoff water in the City's municipal sewer system. The portion of Pier 4 that would be replaced would also include systems to capture and redirect stormwater to the existing stormwater diversion system. The existing stormwater diversion system would continue to limit discharge from the project site into the Bay during construction and operation of the Updated Project and the project would not require the construction of new stormwater drainage facilities or the expansion of existing facilities. Therefore, no new or more severe impacts would occur beyond what was analyzed for the Original Project in the 2019 Final MND.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Like the Original Project, the Updated Project would not increase the operational capacity of the shipyard and would not increase the number of employees employed on site. Therefore, the water usage at the site would remain the same as existing conditions, and no new or expanded entitlements for water would be required. Therefore, the Updated Project would have no new of more severe impacts on water supply and sufficient water supplies would be available during normal, dry and multiple dry years. Thus, no new or more severe impacts would occur beyond what was analyzed for the Original Project in the 2019 Final MND.

c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Like the Original Project, the Updated Project would have five construction workers present on-site during the construction period. Upon completion of the Updated Project, there would be no net increase in operations or operational capacity of the shipyard and no new employees would be employed on site. Thus, the Updated Project would generate a negligible increase in wastewater compared to existing conditions. Therefore, the Updated Project would not impact the capacity or commitments of the wastewater treatment provider and no new or expanded wastewater facilities would be required. Therefore, the Updated Project would have no new of more severe impacts on wastewater capacity beyond what was analyzed for the Original Project in the 2019 Final MND.

d). Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Like the Original Project, there are no proposed changes to operations or capacity at the project site under the Updated Project. Therefore, the Updated Project's solid waste generation would generally be limited to the piles, piers and rubble removed during construction and the five construction workers visiting the project site daily. The project would employ a contractor who would be responsible for the disposal of the removed piles/piers and the portion of the rubble that will be disposed of at the Otay Landfill. The Otay Landfill has a maximum permitted throughput of 6,700 tons of solid waste per day and has a remaining capacity of 21,194,008 cubic yards. Due to the remaining capacity, the Updated Project would not generate

solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. The Updated Project would also not impair the attainment of solid waste reduction goals. Thus, the Updated Project does not generate more severe impacts to utilities or service systems beyond the Original Project that was analyzed in the 2019 Final MND.

g). Comply with federal, state, and local statutes and regulations related to solid waste?

Like the Original Project, the Applicant would employ a contractor who would be responsible for the disposal of the removed piles and debris at a licensed disposal site for RCRA waste. The contractor would comply with federal, state, and local statutes and regulations related to solid waste, and no new or more severe impacts would occur beyond what was analyzed for the Original Project in the 2019 Final MND.

Applicable Mitigation Measures from the 2019 Final MND

There are no mitigation measures or specific conditions from the 2019 Final MND identified to reduce impacts related to utilities and service systems.

4.13 Mandatory Findings of Significance

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
XIII. Mandatory Findings of Significance			
Would the project:			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	No	No	No
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and	No	No	No

ENVIRONMENTAL ISSUE AREA	New Significant Impacts?	Changes in Circumstances?	Changes in Circumstances Constitutes New Information of Substantial Importance?
XIII. Mandatory Findings of Significance			
the effects of past, present and probable future projects)?			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	No	No	No

a) ***Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?***

Like the Original Project, the Updated Project has the potential to directly and indirectly affect wildlife and eelgrass from pile driving and wharf expansion activities. Implementation of mitigation measures BIO-1 through BIO-4 would reduce impacts to marine-related biological resources to less than significant. Pile driving also has the potential to disturb contaminated sediment on the Bay floor and cause it to spread throughout the water column. Implementation of mitigation measures BIO-3 and HAZ-10 would reduce associated impacts to a less-than-significant level. Although the pier and wharf structures planned for removal are upwards of 60 years old, they do not qualify as important examples of major periods of California history or prehistory, as discussed in Section IVa. Thus, the Updated Project would not have any new or more severe impacts beyond what was analyzed for the Original Project in the 2019 Final MND.

b) ***Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?***

Like the Original Project and as documented in this Addendum, impacts associated with the Updated Project would be localized and limited to the short-term construction period. In addition, the Updated Project would be consistent with regional and local plans, including the AQMP, and the project's air pollutant and GHG emissions would be well below the applicable thresholds of significance like the Original Project. The Update Project would not result in conflicts with applicable land use plans and policies. The highly developed nature of the project area, and the project site's location within and adjacent to the Bay, limits the likelihood that other projects would be under construction at the same time and in the same general location as the Updated Project. Other future projects would be within the surrounding area would also be required to comply with applicable local, state, and federal regulations to reduce potential impacts to a

less-than-significant level. Therefore, the project is not anticipated to contribute to considerable environmental impacts beyond what was analyzed for the Original Project in the 2019 Final MND.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Like the Original Project, and as documented in this Addendum to the 2019 Final MND, the Updated Project is not anticipated to result in substantial adverse effect on human beings. The project site is located in an industrial area where (besides workers) humans do not reside. Worker safety would be ensured through compliance with regulations and through the implementation of applicable BMPs and mitigation measures HAZ-1 through HAZ-9 (see Section 4.7) related to the use of hazardous materials and mitigation measure HAZ-10 relative to sediment sampling and remediation. The Updated Project would not cause any new or more severe impacts than what was analyzed in the 2019 Final MND for the Original Project.

INTENTIONALLY LEFT BLANK

5 References

Buchman, M.F. 2008. NOAA Screening Quick Reference Tables, NOAA OR&R Report 08-1. Office of Response and Restoration Division, National Oceanic and Atmospheric Administration.

California Department of Forestry and Fire Protection. 2022. Fire Hazard Severity Zone Viewer. Accessed March 15, 2021. https://egis.fire.ca.gov/FHSZ/

California Department of Transportation (Caltrans). 2020. California State Scenic Highway System Map. Accessed February 19, 2021. https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983

California Department of Resources Recycling and Recovery. 2022. SWIS Facility/Site Activity Details – Otay Landfill (37-AA-0010). Last updated 2019. Accessed March 12, 2021. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1790?siteID=2863

California Emergency Management Agency. June 2009. Tsunami Inundation Map for the Point Loma Quadrangle. Accessed March 15, 2021. https://www.conservation.ca.gov/cgs/Documents/Publications/Tsunami-Maps/Tsunami_Inundation_PointLoma_Quad_SanDiego.pdf

City of San Diego. 2008. City of San Diego General Plan Conservation Element. March 2008. Accessed March 4, 2021. https://www.sandiego.gov/sites/default/files/legacy//planning/genplan/pdf/2012/ce120100.pdf

City of San Diego. 2016. City of San Diego Official Zoning Map Grid 11. February 1, 2016. Accessed February 22, 2021. https://www.sandiego.gov/sites/default/files/legacy/development-services/zoning/pdf/maps/grid11.pdf

Groundwater Exchange. 2021. Coastal Plain of San Diego. Accessed March 15, 2021. https://groundwaterexchange.org/basin/coastal-plain-of-san-diego-9-033/

San Diego Unified Port District (District). Port Master Plan. August 2019.

District. 2020. Port Master Plan. Revised Draft. October 2020. Accessed March 15, 2021. https://pantheonstorage.blob.core.windows.net/waterfront-development/Revised-Draft-Port-Master-Plan-Update-10-2020.pdf

State Water Resources Control Board (SWRCB). August 2009. Water Quality Control Plan for Enclosed Bays and Estuaries.

INTENTIONALLY LEFT BLANK.

Appendix A
CalEEMod Output Files

Table of Contents

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Addendum to HII Wharf Repair Project

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	7.00	User Defined Unit	2.59	112,831.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Area of existing piers and wharfs.

Construction Phase - Based on project description for updated project.

Off-road Equipment - Based on project description for updated project.

Off-road Equipment - Based on project description for updated project.

Off-road Equipment - Based on project description for updated project.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-road Equipment - Based on updated project description.

Trips and VMT - Based on updated project description.

On-road Fugitive Dust - CalEEMod defaults.

Demolition - Based on updated project description.

Vehicle Trips - Construction only.

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	220.00	30.00
tblConstructionPhase	NumDays	220.00	9.00
tblConstructionPhase	NumDays	220.00	141.00
tblConstructionPhase	NumDays	20.00	140.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	35.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblLandscapeEquipment	NumberSummerDays	180	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LandUseSquareFeet	0.00	112,831.00
tblLandUse	LotAcreage	0.00	2.59
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	112.00
tblTripsAndVMT	HaulingTripNumber	2.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	HaulingTripNumber	0.00	28.00
tblTripsAndVMT	HaulingTripNumber	0.00	114.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	3.00	10.00
tblTripsAndVMT	WorkerTripNumber	47.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	47.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	47.00	10.00

2.0 Emissions Summary

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	2.9800e-003	0.0259	0.0395	8.0000e-005	1.3000e-003	1.1200e-003	2.4300e-003	3.2000e-004	1.0400e-003	1.3500e-003	0.0000	7.1442	7.1442	1.9500e-003	1.1000e-004	7.2252
2023	0.0474	0.4304	0.4111	9.8000e-004	6.5300e-003	0.0189	0.0254	1.7400e-003	0.0182	0.0199	0.0000	85.9479	85.9479	0.0145	6.5000e-004	86.5051
2024	0.0474	0.4261	0.3996	9.3000e-004	6.6300e-003	0.0182	0.0248	1.7700e-003	0.0173	0.0191	0.0000	81.3378	81.3378	0.0137	6.5000e-004	81.8737
2025	0.0413	0.3773	0.3284	1.0700e-003	6.6900e-003	0.0149	0.0216	1.7900e-003	0.0139	0.0157	0.0000	94.5384	94.5384	0.0243	6.4000e-004	95.3377
2026	0.0172	0.1623	0.1257	5.1000e-004	2.9600e-003	6.2100e-003	9.1700e-003	7.9000e-004	5.7200e-003	6.5100e-003	0.0000	45.4305	45.4305	0.0138	2.8000e-004	45.8570
Maximum	**0.0474**	**0.4304**	**0.4111**	**1.0700e-003**	**6.6900e-003**	**0.0189**	**0.0254**	**1.7900e-003**	**0.0182**	**0.0199**	**0.0000**	**94.5384**	**94.5384**	**0.0243**	**6.5000e-004**	**95.3377**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	2.9800e-003	0.0259	0.0395	8.0000e-005	1.3000e-003	1.1200e-003	2.4300e-003	3.2000e-004	1.0400e-003	1.3500e-003	0.0000	7.1442	7.1442	1.9500e-003	1.1000e-004	7.2252
2023	0.0474	0.4304	0.4111	9.8000e-004	6.5300e-003	0.0189	0.0254	1.7400e-003	0.0182	0.0199	0.0000	85.9478	85.9478	0.0145	6.5000e-004	86.5050
2024	0.0474	0.4261	0.3996	9.3000e-004	6.6300e-003	0.0182	0.0248	1.7700e-003	0.0173	0.0191	0.0000	81.3377	81.3377	0.0137	6.5000e-004	81.8736
2025	0.0413	0.3773	0.3284	1.0700e-003	6.6900e-003	0.0149	0.0216	1.7900e-003	0.0139	0.0157	0.0000	94.5383	94.5383	0.0243	6.4000e-004	95.3376
2026	0.0172	0.1623	0.1257	5.1000e-004	2.9600e-003	6.2100e-003	9.1700e-003	7.9000e-004	5.7200e-003	6.5100e-003	0.0000	45.4305	45.4305	0.0138	2.8000e-004	45.8570
Maximum	**0.0474**	**0.4304**	**0.4111**	**1.0700e-003**	**6.6900e-003**	**0.0189**	**0.0254**	**1.7900e-003**	**0.0182**	**0.0199**	**0.0000**	**94.5383**	**94.5383**	**0.0243**	**6.5000e-004**	**95.3376**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-15-2022**	**12-14-2022**	0.0109	0.0109
2	**12-15-2022**	**3-14-2023**	0.1870	0.1870
3	**3-15-2023**	**6-14-2023**	0.0339	0.0339
5	**9-15-2023**	**12-14-2023**	0.2354	0.2354
6	**12-15-2023**	**3-14-2024**	0.2215	0.2215
7	**3-15-2024**	**6-14-2024**	0.0336	0.0336
9	**9-15-2024**	**12-14-2024**	0.2184	0.2184

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10	**12-15-2024**	**3-14-2025**	0.2024	0.2024
11	**3-15-2025**	**6-14-2025**	0.0354	0.0354
13	**9-15-2025**	**12-14-2025**	0.1854	0.1854
14	**12-15-2025**	**3-14-2026**	0.1833	0.1833
15	**3-15-2026**	**6-14-2026**	0.0326	0.0326
		Highest	0.2354	0.2354

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Pier 4/Wharf 4	Demolition	9/15/2023	3/28/2024	5	140	
2	Quay Wall Rubble Removal	Demolition	12/1/2022	12/28/2022	5	20	
3	Quay Wall Reinforcement	Building Construction	12/29/2022	2/8/2023	5	30	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Demolition - Pier 1	Demolition	9/15/2024	11/14/2024	5	44	
5	Construction - Pier 4, Phase 1	Building Construction	3/19/2025	3/31/2025	5	9	
6	Demolition - Pier 5	Demolition	11/15/2024	1/15/2025	5	44	
7	Demolition - Pier 7	Demolition	1/16/2025	3/18/2025	5	44	
8	Quay Wall Concrete Cap	Paving	2/9/2023	3/29/2023	5	35	
9	Construction - Pier 4, Phase 2	Building Construction	9/15/2025	3/30/2026	5	141	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Pier 4/Wharf 4	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 4/Wharf 4	Cranes	1	8.00	231	0.29
Demolition - Pier 4/Wharf 4	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 4/Wharf 4	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Quay Wall Rubble Removal	Concrete/Industrial Saws	0	8.00	81	0.73
Quay Wall Rubble Removal	Excavators	1	8.00	158	0.38
Quay Wall Rubble Removal	Rubber Tired Dozers	0	8.00	247	0.40
Quay Wall Rubble Removal	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Quay Wall Reinforcement	Bore/Drill Rigs	1	8.00	221	0.50
Quay Wall Reinforcement	Cranes	1	8.00	231	0.29
Quay Wall Reinforcement	Forklifts	0	7.00	89	0.20
Quay Wall Reinforcement	Generator Sets	0	8.00	84	0.74
Quay Wall Reinforcement	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Quay Wall Reinforcement	Welders	0	8.00	46	0.45

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - Pier 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 1	Cranes	1	8.00	231	0.29
Demolition - Pier 1	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 1	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Construction - Pier 4, Phase 1	Bore/Drill Rigs	1	8.00	221	0.50
Construction - Pier 4, Phase 1	Cranes	1	8.00	231	0.29
Construction - Pier 4, Phase 1	Forklifts	0	7.00	89	0.20
Construction - Pier 4, Phase 1	Generator Sets	0	8.00	84	0.74
Construction - Pier 4, Phase 1	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Construction - Pier 4, Phase 1	Welders	0	8.00	46	0.45
Demolition - Pier 5	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 5	Cranes	1	8.00	231	0.29
Demolition - Pier 5	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 5	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition - Pier 7	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 7	Cranes	1	8.00	231	0.29
Demolition - Pier 7	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 7	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Quay Wall Concrete Cap	Cement and Mortar Mixers	0	8.00	9	0.56
Quay Wall Concrete Cap	Pavers	0	8.00	130	0.42
Quay Wall Concrete Cap	Paving Equipment	0	8.00	132	0.36
Quay Wall Concrete Cap	Pumps	2	8.00	84	0.74
Quay Wall Concrete Cap	Rollers	0	8.00	80	0.38
Quay Wall Concrete Cap	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Construction - Pier 4, Phase 2	Bore/Drill Rigs	1	8.00	221	0.50
Construction - Pier 4, Phase 2	Cranes	1	8.00	231	0.29

Trips and VMT

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Pier 4/Wharf 4	2	10.00	0.00	112.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Quay Wall Rubble Removal	1	10.00	0.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Quay Wall Reinforcement	2	10.00	0.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Pier 1	2	10.00	0.00	36.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Construction - Pier 4, Phase 1	2	10.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Pier 5	2	10.00	0.00	36.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Pier 7	2	10.00	0.00	36.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Quay Wall Concrete Cap	2	10.00	0.00	28.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Construction - Pier 4, Phase 2	2	10.00	0.00	114.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - Pier 4/Wharf 4 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0260	0.2432	0.2087	4.6000e-004		0.0109	0.0109		0.0104	0.0104	0.0000	39.6952	39.6952	7.2400e-003	0.0000	39.8761
Total	**0.0260**	**0.2432**	**0.2087**	**4.6000e-004**		**0.0109**	**0.0109**		**0.0104**	**0.0104**	**0.0000**	**39.6952**	**39.6952**	**7.2400e-003**	**0.0000**	**39.8761**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	4.1300e-003	1.1000e-003	2.0000e-005	5.2000e-004	3.0000e-005	5.5000e-004	1.4000e-004	3.0000e-005	1.8000e-004	0.0000	1.8244	1.8244	9.0000e-005	2.9000e-004	1.9132
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	7.1000e-004	8.6600e-003	3.0000e-005	3.0500e-003	2.0000e-005	3.0600e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.4113	2.4113	7.0000e-005	7.0000e-005	2.4332
Total	**1.1000e-003**	**4.8400e-003**	**9.7600e-003**	**5.0000e-005**	**3.5700e-003**	**5.0000e-005**	**3.6100e-003**	**9.5000e-004**	**5.0000e-005**	**1.0100e-003**	**0.0000**	**4.2358**	**4.2358**	**1.6000e-004**	**3.6000e-004**	**4.3464**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0260	0.2432	0.2087	4.6000e-004		0.0109	0.0109		0.0104	0.0104	0.0000	39.6951	39.6951	7.2400e-003	0.0000	39.8760
Total	**0.0260**	**0.2432**	**0.2087**	**4.6000e-004**		**0.0109**	**0.0109**		**0.0104**	**0.0104**	**0.0000**	**39.6951**	**39.6951**	**7.2400e-003**	**0.0000**	**39.8760**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	4.1300e-003	1.1000e-003	2.0000e-005	5.2000e-004	3.0000e-005	5.5000e-004	1.4000e-004	3.0000e-005	1.8000e-004	0.0000	1.8244	1.8244	9.0000e-005	2.9000e-004	1.9132
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	7.1000e-004	8.6600e-003	3.0000e-005	3.0500e-003	2.0000e-005	3.0600e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.4113	2.4113	7.0000e-005	7.0000e-005	2.4332
Total	**1.1000e-003**	**4.8400e-003**	**9.7600e-003**	**5.0000e-005**	**3.5700e-003**	**5.0000e-005**	**3.6100e-003**	**9.5000e-004**	**5.0000e-005**	**1.0100e-003**	**0.0000**	**4.2358**	**4.2358**	**1.6000e-004**	**3.6000e-004**	**4.3464**

3.2 Demolition - Pier 4/Wharf 4 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0206	0.1894	0.1736	3.8000e-004		8.2000e-003	8.2000e-003		7.8300e-003	7.8300e-003	0.0000	33.4271	33.4271	6.0600e-003	0.0000	33.5787
Total	**0.0206**	**0.1894**	**0.1736**	**3.8000e-004**		**8.2000e-003**	**8.2000e-003**		**7.8300e-003**	**7.8300e-003**	**0.0000**	**33.4271**	**33.4271**	**6.0600e-003**	**0.0000**	**33.5787**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	3.4400e-003	9.4000e-004	2.0000e-005	4.4000e-004	3.0000e-005	4.7000e-004	1.2000e-004	3.0000e-005	1.5000e-004	0.0000	1.5093	1.5093	8.0000e-005	2.4000e-004	1.5829
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	5.4000e-004	6.8100e-003	2.0000e-005	2.5700e-003	1.0000e-005	2.5800e-003	6.8000e-004	1.0000e-005	6.9000e-004	0.0000	1.9641	1.9641	5.0000e-005	5.0000e-005	1.9812
Total	**8.7000e-004**	**3.9800e-003**	**7.7500e-003**	**4.0000e-005**	**3.0100e-003**	**4.0000e-005**	**3.0500e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**3.4734**	**3.4734**	**1.3000e-004**	**2.9000e-004**	**3.5642**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0206	0.1894	0.1736	3.8000e-004		8.2000e-003	8.2000e-003		7.8300e-003	7.8300e-003	0.0000	33.4271	33.4271	6.0600e-003	0.0000	33.5787
Total	**0.0206**	**0.1894**	**0.1736**	**3.8000e-004**		**8.2000e-003**	**8.2000e-003**		**7.8300e-003**	**7.8300e-003**	**0.0000**	**33.4271**	**33.4271**	**6.0600e-003**	**0.0000**	**33.5787**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	3.4400e-003	9.4000e-004	2.0000e-005	4.4000e-004	3.0000e-005	4.7000e-004	1.2000e-004	3.0000e-005	1.5000e-004	0.0000	1.5093	1.5093	8.0000e-005	2.4000e-004	1.5829
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	5.4000e-004	6.8100e-003	2.0000e-005	2.5700e-003	1.0000e-005	2.5800e-003	6.8000e-004	1.0000e-005	6.9000e-004	0.0000	1.9641	1.9641	5.0000e-005	5.0000e-005	1.9812
Total	**8.7000e-004**	**3.9800e-003**	**7.7500e-003**	**4.0000e-005**	**3.0100e-003**	**4.0000e-005**	**3.0500e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**3.4734**	**3.4734**	**1.3000e-004**	**2.9000e-004**	**3.5642**

3.3 Quay Wall Rubble Removal - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0200e-003	0.0178	0.0326	5.0000e-005		8.6000e-004	8.6000e-004		7.9000e-004	7.9000e-004	0.0000	4.5361	4.5361	1.4700e-003	0.0000	4.5727
Total	**2.0200e-003**	**0.0178**	**0.0326**	**5.0000e-005**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**	**4.0000e-005**	**7.9000e-004**	**8.3000e-004**	**0.0000**	**4.5361**	**4.5361**	**1.4700e-003**	**0.0000**	**4.5727**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Quay Wall Rubble Removal - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.3500e-003	3.2000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.5015	0.5015	2.0000e-005	8.0000e-005	0.5258
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.1000e-004	2.4500e-003	1.0000e-005	8.0000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6553	0.6553	2.0000e-005	2.0000e-005	0.6615
Total	**3.3000e-004**	**1.5600e-003**	**2.7700e-003**	**2.0000e-005**	**9.4000e-004**	**1.0000e-005**	**9.6000e-004**	**2.5000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**1.1567**	**1.1567**	**4.0000e-005**	**1.0000e-004**	**1.1873**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0200e-003	0.0178	0.0326	5.0000e-005		8.6000e-004	8.6000e-004		7.9000e-004	7.9000e-004	0.0000	4.5361	4.5361	1.4700e-003	0.0000	4.5727
Total	**2.0200e-003**	**0.0178**	**0.0326**	**5.0000e-005**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**	**4.0000e-005**	**7.9000e-004**	**8.3000e-004**	**0.0000**	**4.5361**	**4.5361**	**1.4700e-003**	**0.0000**	**4.5727**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Quay Wall Rubble Removal - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.3500e-003	3.2000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.5015	0.5015	2.0000e-005	8.0000e-005	0.5258
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.1000e-004	2.4500e-003	1.0000e-005	8.0000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6553	0.6553	2.0000e-005	2.0000e-005	0.6615
Total	**3.3000e-004**	**1.5600e-003**	**2.7700e-003**	**2.0000e-005**	**9.4000e-004**	**1.0000e-005**	**9.6000e-004**	**2.5000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**1.1567**	**1.1567**	**4.0000e-005**	**1.0000e-004**	**1.1873**

3.4 Quay Wall Reinforcement - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.0000e-004	6.4500e-003	3.9300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.3000e-004	2.3000e-004	0.0000	1.3357	1.3357	4.3000e-004	0.0000	1.3465
Total	**6.0000e-004**	**6.4500e-003**	**3.9300e-003**	**2.0000e-005**		**2.5000e-004**	**2.5000e-004**		**2.3000e-004**	**2.3000e-004**	**0.0000**	**1.3357**	**1.3357**	**4.3000e-004**	**0.0000**	**1.3465**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0501	0.0501	0.0000	1.0000e-005	0.0526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0655	0.0655	0.0000	0.0000	0.0662
Total	**3.0000e-005**	**1.5000e-004**	**2.8000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.1157**	**0.1157**	**0.0000**	**1.0000e-005**	**0.1187**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.0000e-004	6.4500e-003	3.9300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.3000e-004	2.3000e-004	0.0000	1.3357	1.3357	4.3000e-004	0.0000	1.3465
Total	**6.0000e-004**	**6.4500e-003**	**3.9300e-003**	**2.0000e-005**		**2.5000e-004**	**2.5000e-004**		**2.3000e-004**	**2.3000e-004**	**0.0000**	**1.3357**	**1.3357**	**4.3000e-004**	**0.0000**	**1.3465**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0501	0.0501	0.0000	1.0000e-005	0.0526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0655	0.0655	0.0000	0.0000	0.0662
Total	**3.0000e-005**	**1.5000e-004**	**2.8000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.1157**	**0.1157**	**0.0000**	**1.0000e-005**	**0.1187**

3.4 Quay Wall Reinforcement - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.9300e-003	0.0820	0.0541	2.1000e-004		3.1600e-003	3.1600e-003		2.9000e-003	2.9000e-003	0.0000	18.7235	18.7235	6.0600e-003	0.0000	18.8749
Total	**7.9300e-003**	**0.0820**	**0.0541**	**2.1000e-004**		**3.1600e-003**	**3.1600e-003**		**2.9000e-003**	**2.9000e-003**	**0.0000**	**18.7235**	**18.7235**	**6.0600e-003**	**0.0000**	**18.8749**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.6722	0.6722	3.0000e-005	1.1000e-004	0.7049
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.6000e-004	3.1900e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.8884	0.8884	3.0000e-005	2.0000e-005	0.8964
Total	**4.0000e-004**	**1.7800e-003**	**3.5900e-003**	**2.0000e-005**	**1.3100e-003**	**2.0000e-005**	**1.3300e-003**	**3.5000e-004**	**2.0000e-005**	**3.6000e-004**	**0.0000**	**1.5605**	**1.5605**	**6.0000e-005**	**1.3000e-004**	**1.6013**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.9300e-003	0.0820	0.0541	2.1000e-004		3.1600e-003	3.1600e-003		2.9000e-003	2.9000e-003	0.0000	18.7235	18.7235	6.0600e-003	0.0000	18.8749
Total	**7.9300e-003**	**0.0820**	**0.0541**	**2.1000e-004**		**3.1600e-003**	**3.1600e-003**		**2.9000e-003**	**2.9000e-003**	**0.0000**	**18.7235**	**18.7235**	**6.0600e-003**	**0.0000**	**18.8749**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.6722	0.6722	3.0000e-005	1.1000e-004	0.7049
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.6000e-004	3.1900e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.8884	0.8884	3.0000e-005	2.0000e-005	0.8964
Total	**4.0000e-004**	**1.7800e-003**	**3.5900e-003**	**2.0000e-005**	**1.3100e-003**	**2.0000e-005**	**1.3300e-003**	**3.5000e-004**	**2.0000e-005**	**3.6000e-004**	**0.0000**	**1.5605**	**1.5605**	**6.0000e-005**	**1.3000e-004**	**1.6013**

3.5 Demolition - Pier 1 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0142	0.1302	0.1194	2.6000e-004		5.6400e-003	5.6400e-003		5.3800e-003	5.3800e-003	0.0000	22.9812	22.9812	4.1700e-003	0.0000	23.0854
Total	**0.0142**	**0.1302**	**0.1194**	**2.6000e-004**		**5.6400e-003**	**5.6400e-003**		**5.3800e-003**	**5.3800e-003**	**0.0000**	**22.9812**	**22.9812**	**4.1700e-003**	**0.0000**	**23.0854**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Demolition - Pier 1 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	2.4200e-003	6.6000e-004	1.0000e-005	3.1000e-004	2.0000e-005	3.3000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0613	1.0613	6.0000e-005	1.7000e-004	1.1130
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.7000e-004	4.6800e-003	1.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3503	1.3503	4.0000e-005	4.0000e-005	1.3621
Total	**6.0000e-004**	**2.7900e-003**	**5.3400e-003**	**2.0000e-005**	**2.0700e-003**	**3.0000e-005**	**2.1000e-003**	**5.5000e-004**	**3.0000e-005**	**5.8000e-004**	**0.0000**	**2.4116**	**2.4116**	**1.0000e-004**	**2.1000e-004**	**2.4751**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0142	0.1302	0.1193	2.6000e-004		5.6400e-003	5.6400e-003		5.3800e-003	5.3800e-003	0.0000	22.9811	22.9811	4.1700e-003	0.0000	23.0854
Total	**0.0142**	**0.1302**	**0.1193**	**2.6000e-004**		**5.6400e-003**	**5.6400e-003**		**5.3800e-003**	**5.3800e-003**	**0.0000**	**22.9811**	**22.9811**	**4.1700e-003**	**0.0000**	**23.0854**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Demolition - Pier 1 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	2.4200e-003	6.6000e-004	1.0000e-005	3.1000e-004	2.0000e-005	3.3000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0613	1.0613	6.0000e-005	1.7000e-004	1.1130
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.7000e-004	4.6800e-003	1.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3503	1.3503	4.0000e-005	4.0000e-005	1.3621
Total	**6.0000e-004**	**2.7900e-003**	**5.3400e-003**	**2.0000e-005**	**2.0700e-003**	**3.0000e-005**	**2.1000e-003**	**5.5000e-004**	**3.0000e-005**	**5.8000e-004**	**0.0000**	**2.4116**	**2.4116**	**1.0000e-004**	**2.1000e-004**	**2.4751**

3.6 Construction - Pier 4, Phase 1 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3500e-003	0.0227	0.0170	7.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	6.0258	6.0258	1.9500e-003	0.0000	6.0746
Total	**2.3500e-003**	**0.0227**	**0.0170**	**7.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.1000e-004**	**8.1000e-004**	**0.0000**	**6.0258**	**6.0258**	**1.9500e-003**	**0.0000**	**6.0746**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Construction - Pier 4, Phase 1 - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	5.3000e-004	1.5000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2311	0.2311	1.0000e-005	4.0000e-005	0.2423
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	9.0000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2668	0.2668	1.0000e-005	1.0000e-005	0.2691
Total	**1.2000e-004**	**6.0000e-004**	**1.0500e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.3000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.4979**	**0.4979**	**2.0000e-005**	**5.0000e-005**	**0.5114**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3500e-003	0.0227	0.0170	7.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	6.0258	6.0258	1.9500e-003	0.0000	6.0746
Total	**2.3500e-003**	**0.0227**	**0.0170**	**7.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.1000e-004**	**8.1000e-004**	**0.0000**	**6.0258**	**6.0258**	**1.9500e-003**	**0.0000**	**6.0746**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Construction - Pier 4, Phase 1 - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	5.3000e-004	1.5000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2311	0.2311	1.0000e-005	4.0000e-005	0.2423
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	9.0000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2668	0.2668	1.0000e-005	1.0000e-005	0.2691
Total	**1.2000e-004**	**6.0000e-004**	**1.0500e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.3000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.4979**	**0.4979**	**2.0000e-005**	**5.0000e-005**	**0.5114**

3.7 Demolition - Pier 5 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.0977	0.0895	2.0000e-004		4.2300e-003	4.2300e-003		4.0400e-003	4.0400e-003	0.0000	17.2359	17.2359	3.1300e-003	0.0000	17.3140
Total	**0.0106**	**0.0977**	**0.0895**	**2.0000e-004**		**4.2300e-003**	**4.2300e-003**		**4.0400e-003**	**4.0400e-003**	**0.0000**	**17.2359**	**17.2359**	**3.1300e-003**	**0.0000**	**17.3140**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.8200e-003	4.9000e-004	1.0000e-005	2.3000e-004	2.0000e-005	2.5000e-004	6.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7959	0.7959	4.0000e-005	1.3000e-004	0.8347
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.8000e-004	3.5100e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.0127	1.0127	3.0000e-005	3.0000e-005	1.0216
Total	**4.5000e-004**	**2.1000e-003**	**4.0000e-003**	**2.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5800e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**1.8087**	**1.8087**	**7.0000e-005**	**1.6000e-004**	**1.8563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.0977	0.0895	2.0000e-004		4.2300e-003	4.2300e-003		4.0400e-003	4.0400e-003	0.0000	17.2358	17.2358	3.1300e-003	0.0000	17.3140
Total	**0.0106**	**0.0977**	**0.0895**	**2.0000e-004**		**4.2300e-003**	**4.2300e-003**		**4.0400e-003**	**4.0400e-003**	**0.0000**	**17.2358**	**17.2358**	**3.1300e-003**	**0.0000**	**17.3140**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.8200e-003	4.9000e-004	1.0000e-005	2.3000e-004	2.0000e-005	2.5000e-004	6.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7959	0.7959	4.0000e-005	1.3000e-004	0.8347
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.8000e-004	3.5100e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.0127	1.0127	3.0000e-005	3.0000e-005	1.0216
Total	**4.5000e-004**	**2.1000e-003**	**4.0000e-003**	**2.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5800e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**1.8087**	**1.8087**	**7.0000e-005**	**1.6000e-004**	**1.8563**

3.7 Demolition - Pier 5 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3400e-003	0.0299	0.0296	7.0000e-005		1.2500e-003	1.2500e-003		1.1900e-003	1.1900e-003	0.0000	5.7454	5.7454	1.0300e-003	0.0000	5.7712
Total	**3.3400e-003**	**0.0299**	**0.0296**	**7.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**5.7454**	**5.7454**	**1.0300e-003**	**0.0000**	**5.7712**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.0000e-004	1.7000e-004	0.0000	8.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.2599	0.2599	1.0000e-005	4.0000e-005	0.2726
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	1.1000e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3261	0.3261	1.0000e-005	1.0000e-005	0.3289
Total	**1.4000e-004**	**6.8000e-004**	**1.2700e-003**	**0.0000**	**5.2000e-004**	**1.0000e-005**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.5860**	**0.5860**	**2.0000e-005**	**5.0000e-005**	**0.6015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3400e-003	0.0299	0.0296	7.0000e-005		1.2500e-003	1.2500e-003		1.1900e-003	1.1900e-003	0.0000	5.7454	5.7454	1.0300e-003	0.0000	5.7712
Total	**3.3400e-003**	**0.0299**	**0.0296**	**7.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**5.7454**	**5.7454**	**1.0300e-003**	**0.0000**	**5.7712**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.0000e-004	1.7000e-004	0.0000	8.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.2599	0.2599	1.0000e-005	4.0000e-005	0.2726
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	1.1000e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3261	0.3261	1.0000e-005	1.0000e-005	0.3289
Total	**1.4000e-004**	**6.8000e-004**	**1.2700e-003**	**0.0000**	**5.2000e-004**	**1.0000e-005**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.5860**	**0.5860**	**2.0000e-005**	**5.0000e-005**	**0.6015**

3.8 Demolition - Pier 7 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0134	0.1196	0.1184	2.6000e-004		5.0000e-003	5.0000e-003		4.7700e-003	4.7700e-003	0.0000	22.9816	22.9816	4.1300e-003	0.0000	23.0847
Total	**0.0134**	**0.1196**	**0.1184**	**2.6000e-004**		**5.0000e-003**	**5.0000e-003**		**4.7700e-003**	**4.7700e-003**	**0.0000**	**22.9816**	**22.9816**	**4.1300e-003**	**0.0000**	**23.0847**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.8 Demolition - Pier 7 - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	2.3900e-003	6.7000e-004	1.0000e-005	3.1000e-004	2.0000e-005	3.3000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0397	1.0397	6.0000e-005	1.7000e-004	1.0905
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	3.3000e-004	4.3900e-003	1.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3044	1.3044	3.0000e-005	3.0000e-005	1.3154
Total	**5.7000e-004**	**2.7200e-003**	**5.0600e-003**	**2.0000e-005**	**2.0700e-003**	**3.0000e-005**	**2.1000e-003**	**5.5000e-004**	**3.0000e-005**	**5.8000e-004**	**0.0000**	**2.3441**	**2.3441**	**9.0000e-005**	**2.0000e-004**	**2.4060**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0134	0.1196	0.1184	2.6000e-004		5.0000e-003	5.0000e-003		4.7700e-003	4.7700e-003	0.0000	22.9815	22.9815	4.1300e-003	0.0000	23.0847
Total	**0.0134**	**0.1196**	**0.1184**	**2.6000e-004**		**5.0000e-003**	**5.0000e-003**		**4.7700e-003**	**4.7700e-003**	**0.0000**	**22.9815**	**22.9815**	**4.1300e-003**	**0.0000**	**23.0847**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.8 Demolition - Pier 7 - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	2.3900e-003	6.7000e-004	1.0000e-005	3.1000e-004	2.0000e-005	3.3000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0397	1.0397	6.0000e-005	1.7000e-004	1.0905
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	3.3000e-004	4.3900e-003	1.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3044	1.3044	3.0000e-005	3.0000e-005	1.3154
Total	**5.7000e-004**	**2.7200e-003**	**5.0600e-003**	**2.0000e-005**	**2.0700e-003**	**3.0000e-005**	**2.1000e-003**	**5.5000e-004**	**3.0000e-005**	**5.8000e-004**	**0.0000**	**2.3441**	**2.3441**	**9.0000e-005**	**2.0000e-004**	**2.4060**

3.9 Quay Wall Concrete Cap - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0115	0.0964	0.1304	2.3000e-004		4.7200e-003	4.7200e-003		4.7200e-003	4.7200e-003	0.0000	19.7823	19.7823	9.1000e-004	0.0000	19.8049
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0115**	**0.0964**	**0.1304**	**2.3000e-004**		**4.7200e-003**	**4.7200e-003**		**4.7200e-003**	**4.7200e-003**	**0.0000**	**19.7823**	**19.7823**	**9.1000e-004**	**0.0000**	**19.8049**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.9 Quay Wall Concrete Cap - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.9000e-003	5.1000e-004	1.0000e-005	2.4000e-004	2.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8402	0.8402	4.0000e-005	1.3000e-004	0.8811
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.3000e-004	3.9900e-003	1.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.1105	1.1105	3.0000e-005	3.0000e-005	1.1205
Total	**5.0000e-004**	**2.2300e-003**	**4.5000e-003**	**2.0000e-005**	**1.6400e-003**	**3.0000e-005**	**1.6700e-003**	**4.4000e-004**	**2.0000e-005**	**4.6000e-004**	**0.0000**	**1.9507**	**1.9507**	**7.0000e-005**	**1.6000e-004**	**2.0016**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0115	0.0964	0.1304	2.3000e-004		4.7200e-003	4.7200e-003		4.7200e-003	4.7200e-003	0.0000	19.7822	19.7822	9.1000e-004	0.0000	19.8049
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0115**	**0.0964**	**0.1304**	**2.3000e-004**		**4.7200e-003**	**4.7200e-003**		**4.7200e-003**	**4.7200e-003**	**0.0000**	**19.7822**	**19.7822**	**9.1000e-004**	**0.0000**	**19.8049**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.9 Quay Wall Concrete Cap - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.9000e-003	5.1000e-004	1.0000e-005	2.4000e-004	2.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8402	0.8402	4.0000e-005	1.3000e-004	0.8811
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.3000e-004	3.9900e-003	1.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.1105	1.1105	3.0000e-005	3.0000e-005	1.1205
Total	**5.0000e-004**	**2.2300e-003**	**4.5000e-003**	**2.0000e-005**	**1.6400e-003**	**3.0000e-005**	**1.6700e-003**	**4.4000e-004**	**2.0000e-005**	**4.6000e-004**	**0.0000**	**1.9507**	**1.9507**	**7.0000e-005**	**1.6000e-004**	**2.0016**

3.10 Construction - Pier 4, Phase 2 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0204	0.1963	0.1471	5.9000e-004		7.6400e-003	7.6400e-003		7.0300e-003	7.0300e-003	0.0000	52.2239	52.2239	0.0169	0.0000	52.6461
Total	**0.0204**	**0.1963**	**0.1471**	**5.9000e-004**		**7.6400e-003**	**7.6400e-003**		**7.0300e-003**	**7.0300e-003**	**0.0000**	**52.2239**	**52.2239**	**0.0169**	**0.0000**	**52.6461**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	4.1800e-003	1.1700e-003	2.0000e-005	5.4000e-004	4.0000e-005	5.8000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	1.8214	1.8214	1.0000e-004	2.9000e-004	1.9104
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	5.9000e-004	7.7800e-003	3.0000e-005	3.1300e-003	2.0000e-005	3.1400e-003	8.3000e-004	1.0000e-005	8.5000e-004	0.0000	2.3123	2.3123	6.0000e-005	6.0000e-005	2.3319
Total	**1.0000e-003**	**4.7700e-003**	**8.9500e-003**	**5.0000e-005**	**3.6700e-003**	**6.0000e-005**	**3.7200e-003**	**9.8000e-004**	**4.0000e-005**	**1.0300e-003**	**0.0000**	**4.1337**	**4.1337**	**1.6000e-004**	**3.5000e-004**	**4.2422**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0204	0.1963	0.1471	5.9000e-004		7.6400e-003	7.6400e-003		7.0300e-003	7.0300e-003	0.0000	52.2238	52.2238	0.0169	0.0000	52.6461
Total	**0.0204**	**0.1963**	**0.1471**	**5.9000e-004**		**7.6400e-003**	**7.6400e-003**		**7.0300e-003**	**7.0300e-003**	**0.0000**	**52.2238**	**52.2238**	**0.0169**	**0.0000**	**52.6461**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	4.1800e-003	1.1700e-003	2.0000e-005	5.4000e-004	4.0000e-005	5.8000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	1.8214	1.8214	1.0000e-004	2.9000e-004	1.9104
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	5.9000e-004	7.7800e-003	3.0000e-005	3.1300e-003	2.0000e-005	3.1400e-003	8.3000e-004	1.0000e-005	8.5000e-004	0.0000	2.3123	2.3123	6.0000e-005	6.0000e-005	2.3319
Total	**1.0000e-003**	**4.7700e-003**	**8.9500e-003**	**5.0000e-005**	**3.6700e-003**	**6.0000e-005**	**3.7200e-003**	**9.8000e-004**	**4.0000e-005**	**1.0300e-003**	**0.0000**	**4.1337**	**4.1337**	**1.6000e-004**	**3.5000e-004**	**4.2422**

3.10 Construction - Pier 4, Phase 2 - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0165	0.1586	0.1188	4.8000e-004		6.1700e-003	6.1700e-003		5.6800e-003	5.6800e-003	0.0000	42.1808	42.1808	0.0136	0.0000	42.5219
Total	**0.0165**	**0.1586**	**0.1188**	**4.8000e-004**		**6.1700e-003**	**6.1700e-003**		**5.6800e-003**	**5.6800e-003**	**0.0000**	**42.1808**	**42.1808**	**0.0136**	**0.0000**	**42.5219**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	3.3300e-003	9.6000e-004	1.0000e-005	4.4000e-004	3.0000e-005	4.6000e-004	1.2000e-004	3.0000e-005	1.5000e-004	0.0000	1.4404	1.4404	8.0000e-005	2.3000e-004	1.5109
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	4.4000e-004	5.9300e-003	2.0000e-005	2.5300e-003	1.0000e-005	2.5400e-003	6.7000e-004	1.0000e-005	6.8000e-004	0.0000	1.8093	1.8093	5.0000e-005	5.0000e-005	1.8242
Total	**7.6000e-004**	**3.7700e-003**	**6.8900e-003**	**3.0000e-005**	**2.9700e-003**	**4.0000e-005**	**3.0000e-003**	**7.9000e-004**	**4.0000e-005**	**8.3000e-004**	**0.0000**	**3.2497**	**3.2497**	**1.3000e-004**	**2.8000e-004**	**3.3351**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0165	0.1586	0.1188	4.8000e-004		6.1700e-003	6.1700e-003		5.6800e-003	5.6800e-003	0.0000	42.1808	42.1808	0.0136	0.0000	42.5218
Total	**0.0165**	**0.1586**	**0.1188**	**4.8000e-004**		**6.1700e-003**	**6.1700e-003**		**5.6800e-003**	**5.6800e-003**	**0.0000**	**42.1808**	**42.1808**	**0.0136**	**0.0000**	**42.5218**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	3.3300e-003	9.6000e-004	1.0000e-005	4.4000e-004	3.0000e-005	4.6000e-004	1.2000e-004	3.0000e-005	1.5000e-004	0.0000	1.4404	1.4404	8.0000e-005	2.3000e-004	1.5109
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	4.4000e-004	5.9300e-003	2.0000e-005	2.5300e-003	1.0000e-005	2.5400e-003	6.7000e-004	1.0000e-005	6.8000e-004	0.0000	1.8093	1.8093	5.0000e-005	5.0000e-005	1.8242
Total	**7.6000e-004**	**3.7700e-003**	**6.8900e-003**	**3.0000e-005**	**2.9700e-003**	**4.0000e-005**	**3.0000e-003**	**7.9000e-004**	**4.0000e-005**	**8.3000e-004**	**0.0000**	**3.2497**	**3.2497**	**1.3000e-004**	**2.8000e-004**	**3.3351**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Addendum to HII Wharf Repair Project

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	7.00	User Defined Unit	2.59	112,831.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Area of existing piers and wharfs.

Construction Phase - Based on project description for updated project.

Off-road Equipment - Based on project description for updated project.

Off-road Equipment - Based on project description for updated project.

Off-road Equipment - Based on project description for updated project.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-road Equipment - Based on updated project description.

Trips and VMT - Based on updated project description.

On-road Fugitive Dust - CalEEMod defaults.

Demolition - Based on updated project description.

Vehicle Trips - Construction only.

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	220.00	30.00
tblConstructionPhase	NumDays	220.00	9.00
tblConstructionPhase	NumDays	220.00	141.00
tblConstructionPhase	NumDays	20.00	140.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	35.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblLandscapeEquipment	NumberSummerDays	180	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LandUseSquareFeet	0.00	112,831.00
tblLandUse	LotAcreage	0.00	2.59
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	112.00
tblTripsAndVMT	HaulingTripNumber	2.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	HaulingTripNumber	0.00	28.00
tblTripsAndVMT	HaulingTripNumber	0.00	114.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	3.00	10.00
tblTripsAndVMT	WorkerTripNumber	47.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	47.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	47.00	10.00

2.0 Emissions Summary

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.6299	6.5996	4.2240	0.0165	0.1232	0.2482	0.3443	0.0297	0.2284	0.2540	0.0000	1,603.4275	1,603.4275	0.4811	0.0108	1,618.6558
2023	0.7143	6.5214	7.7193	0.0164	0.0961	0.2889	0.3851	0.0256	0.2761	0.3017	0.0000	1,600.4911	1,600.4911	0.4815	0.0102	1,615.5793
2024	0.6721	6.0399	5.6785	0.0132	0.0965	0.2577	0.3541	0.0257	0.2459	0.2717	0.0000	1,275.5799	1,275.5799	0.2135	0.0102	1,283.9476
2025	0.6339	5.5557	5.6211	0.0164	0.0977	0.2288	0.3253	0.0261	0.2179	0.2437	0.0000	1,601.1864	1,601.1864	0.4822	0.0106	1,616.4045
2026	0.5467	5.1478	4.0004	0.0164	0.0963	0.1972	0.2935	0.0257	0.1814	0.2071	0.0000	1,592.8504	1,592.8504	0.4819	9.5500e-003	1,607.7418
Maximum	**0.7143**	**6.5996**	**7.7193**	**0.0165**	**0.1232**	**0.2889**	**0.3851**	**0.0297**	**0.2761**	**0.3017**	**0.0000**	**1,603.4275**	**1,603.4275**	**0.4822**	**0.0108**	**1,618.6558**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.6299	6.5996	4.2240	0.0165	0.1232	0.2482	0.3443	0.0297	0.2284	0.2540	0.0000	1,603.4275	1,603.4275	0.4811	0.0108	1,618.6558
2023	0.7143	6.5214	7.7193	0.0164	0.0961	0.2889	0.3851	0.0256	0.2761	0.3017	0.0000	1,600.4911	1,600.4911	0.4815	0.0102	1,615.5793
2024	0.6721	6.0399	5.6785	0.0132	0.0965	0.2577	0.3541	0.0257	0.2459	0.2717	0.0000	1,275.5799	1,275.5799	0.2135	0.0102	1,283.9476
2025	0.6339	5.5557	5.6211	0.0164	0.0977	0.2288	0.3253	0.0261	0.2179	0.2437	0.0000	1,601.1864	1,601.1864	0.4822	0.0106	1,616.4045
2026	0.5467	5.1478	4.0004	0.0164	0.0963	0.1972	0.2935	0.0257	0.1814	0.2071	0.0000	1,592.8504	1,592.8504	0.4819	9.5500e-003	1,607.7418
Maximum	**0.7143**	**6.5996**	**7.7193**	**0.0165**	**0.1232**	**0.2889**	**0.3851**	**0.0297**	**0.2761**	**0.3017**	**0.0000**	**1,603.4275**	**1,603.4275**	**0.4822**	**0.0108**	**1,618.6558**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0000e-005**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.5300e-003**	**1.5300e-003**	**0.0000**	**0.0000**	**1.6300e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0000e-005**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.5300e-003**	**1.5300e-003**	**0.0000**	**0.0000**	**1.6300e-003**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Pier 4/Wharf 4	Demolition	9/15/2023	3/28/2024	5	140	
2	Quay Wall Rubble Removal	Demolition	12/1/2022	12/28/2022	5	20	
3	Quay Wall Reinforcement	Building Construction	12/29/2022	2/8/2023	5	30	
4	Demolition - Pier 1	Demolition	9/15/2024	11/14/2024	5	44	
5	Construction - Pier 4, Phase 1	Building Construction	3/19/2025	3/31/2025	5	9	
6	Demolition - Pier 5	Demolition	11/15/2024	1/15/2025	5	44	
7	Demolition - Pier 7	Demolition	1/16/2025	3/18/2025	5	44	
8	Quay Wall Concrete Cap	Paving	2/9/2023	3/29/2023	5	35	
9	Construction - Pier 4, Phase 2	Building Construction	9/15/2025	3/30/2026	5	141	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Pier 4/Wharf 4	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 4/Wharf 4	Cranes	1	8.00	231	0.29

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - Pier 4/Wharf 4	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 4/Wharf 4	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Quay Wall Rubble Removal	Concrete/Industrial Saws	0	8.00	81	0.73
Quay Wall Rubble Removal	Excavators	1	8.00	158	0.38
Quay Wall Rubble Removal	Rubber Tired Dozers	0	8.00	247	0.40
Quay Wall Rubble Removal	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Quay Wall Reinforcement	Bore/Drill Rigs	1	8.00	221	0.50
Quay Wall Reinforcement	Cranes	1	8.00	231	0.29
Quay Wall Reinforcement	Forklifts	0	7.00	89	0.20
Quay Wall Reinforcement	Generator Sets	0	8.00	84	0.74
Quay Wall Reinforcement	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Quay Wall Reinforcement	Welders	0	8.00	46	0.45
Demolition - Pier 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 1	Cranes	1	8.00	231	0.29
Demolition - Pier 1	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 1	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Construction - Pier 4, Phase 1	Bore/Drill Rigs	1	8.00	221	0.50
Construction - Pier 4, Phase 1	Cranes	1	8.00	231	0.29
Construction - Pier 4, Phase 1	Forklifts	0	7.00	89	0.20
Construction - Pier 4, Phase 1	Generator Sets	0	8.00	84	0.74
Construction - Pier 4, Phase 1	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Construction - Pier 4, Phase 1	Welders	0	8.00	46	0.45
Demolition - Pier 5	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 5	Cranes	1	8.00	231	0.29
Demolition - Pier 5	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 5	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition - Pier 7	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 7	Cranes	1	8.00	231	0.29
Demolition - Pier 7	Rubber Tired Dozers	0	8.00	247	0.40

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - Pier 7	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Quay Wall Concrete Cap	Cement and Mortar Mixers	0	8.00	9	0.56
Quay Wall Concrete Cap	Pavers	0	8.00	130	0.42
Quay Wall Concrete Cap	Paving Equipment	0	8.00	132	0.36
Quay Wall Concrete Cap	Pumps	2	8.00	84	0.74
Quay Wall Concrete Cap	Rollers	0	8.00	80	0.38
Quay Wall Concrete Cap	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Construction - Pier 4, Phase 2	Bore/Drill Rigs	1	8.00	221	0.50
Construction - Pier 4, Phase 2	Cranes	1	8.00	231	0.29

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Pier 4/Wharf 4	2	10.00	0.00	112.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Quay Wall Rubble Removal	1	10.00	0.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Quay Wall Reinforcement	2	10.00	0.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Pier 1	2	10.00	0.00	36.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Construction - Pier 4, Phase 1	2	10.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Pier 5	2	10.00	0.00	36.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Pier 7	2	10.00	0.00	36.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Quay Wall Concrete Cap	2	10.00	0.00	28.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Construction - Pier 4, Phase 2	2	10.00	0.00	114.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6851	6.3998	5.4918	0.0120		0.2876	0.2876		0.2749	0.2749		1,151.4849	1,151.4849	0.2099		1,156.7333
Total	**0.6851**	**6.3998**	**5.4918**	**0.0120**		**0.2876**	**0.2876**		**0.2749**	**0.2749**		**1,151.4849**	**1,151.4849**	**0.2099**		**1,156.7333**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0288	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9022	52.9022	2.6700e-003	8.4100e-003	55.4759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0170	0.2400	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		73.3664	73.3664	1.9900e-003	1.8300e-003	73.9611
Total	**0.0291**	**0.1216**	**0.2687**	**1.2100e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**126.2686**	**126.2686**	**4.6600e-003**	**0.0102**	**129.4370**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6851	6.3998	5.4918	0.0120		0.2876	0.2876		0.2749	0.2749	0.0000	1,151.4849	1,151.4849	0.2099		1,156.7333
Total	**0.6851**	**6.3998**	**5.4918**	**0.0120**		**0.2876**	**0.2876**		**0.2749**	**0.2749**	**0.0000**	**1,151.4849**	**1,151.4849**	**0.2099**		**1,156.7333**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0288	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9022	52.9022	2.6700e-003	8.4100e-003	55.4759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0170	0.2400	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		73.3664	73.3664	1.9900e-003	1.8300e-003	73.9611
Total	**0.0291**	**0.1216**	**0.2687**	**1.2100e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**126.2686**	**126.2686**	**4.6600e-003**	**0.0102**	**129.4370**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447		1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**		**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7900e-003	0.1037	0.0292	4.7000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		51.9709	51.9709	2.7500e-003	8.2700e-003	54.5043
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0153	0.2239	7.0000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9559	70.9559	1.8100e-003	1.7100e-003	71.5104
Total	**0.0275**	**0.1190**	**0.2530**	**1.1700e-003**	**0.0961**	**1.3100e-003**	**0.0975**	**0.0256**	**1.2400e-003**	**0.0269**		**122.9268**	**122.9268**	**4.5600e-003**	**9.9800e-003**	**126.0148**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447	0.0000	1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**	**0.0000**	**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7900e-003	0.1037	0.0292	4.7000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		51.9709	51.9709	2.7500e-003	8.2700e-003	54.5043
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0153	0.2239	7.0000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9559	70.9559	1.8100e-003	1.7100e-003	71.5104
Total	**0.0275**	**0.1190**	**0.2530**	**1.1700e-003**	**0.0961**	**1.3100e-003**	**0.0975**	**0.0256**	**1.2400e-003**	**0.0269**		**122.9268**	**122.9268**	**4.5600e-003**	**9.9800e-003**	**126.0148**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Quay Wall Rubble Removal - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0271	0.0000	0.0271	4.1000e-003	0.0000	4.1000e-003			0.0000			0.0000
Off-Road	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790		500.0153	500.0153	0.1617		504.0582
Total	**0.2024**	**1.7770**	**3.2551**	**5.1700e-003**	**0.0271**	**0.0859**	**0.1130**	**4.1000e-003**	**0.0790**	**0.0831**		**500.0153**	**500.0153**	**0.1617**		**504.0582**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.5900e-003	0.1299	0.0316	5.0000e-004	0.0140	1.2500e-003	0.0152	3.8400e-003	1.2000e-003	5.0300e-003		55.2656	55.2656	2.6600e-003	8.7800e-003	57.9482
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0328**	**0.1489**	**0.2905**	**1.2500e-003**	**0.0961**	**1.7100e-003**	**0.0979**	**0.0256**	**1.6300e-003**	**0.0273**		**131.0364**	**131.0364**	**4.8500e-003**	**0.0108**	**134.3596**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Quay Wall Rubble Removal - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0271	0.0000	0.0271	4.1000e-003	0.0000	4.1000e-003			0.0000			0.0000
Off-Road	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790	0.0000	500.0153	500.0153	0.1617		504.0582
Total	**0.2024**	**1.7770**	**3.2551**	**5.1700e-003**	**0.0271**	**0.0859**	**0.1130**	**4.1000e-003**	**0.0790**	**0.0831**	**0.0000**	**500.0153**	**500.0153**	**0.1617**		**504.0582**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.5900e-003	0.1299	0.0316	5.0000e-004	0.0140	1.2500e-003	0.0152	3.8400e-003	1.2000e-003	5.0300e-003		55.2656	55.2656	2.6600e-003	8.7800e-003	57.9482
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0328**	**0.1489**	**0.2905**	**1.2500e-003**	**0.0961**	**1.7100e-003**	**0.0979**	**0.0256**	**1.6300e-003**	**0.0273**		**131.0364**	**131.0364**	**4.8500e-003**	**0.0108**	**134.3596**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5971	6.4507	3.9335	0.0152		0.2465	0.2465		0.2268	0.2268		1,472.3912	1,472.3912	0.4762		1,484.2962
Total	**0.5971**	**6.4507**	**3.9335**	**0.0152**		**0.2465**	**0.2465**		**0.2268**	**0.2268**		**1,472.3912**	**1,472.3912**	**0.4762**		**1,484.2962**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.5900e-003	0.1299	0.0316	5.0000e-004	0.0140	1.2500e-003	0.0152	3.8400e-003	1.2000e-003	5.0300e-003		55.2656	55.2656	2.6600e-003	8.7800e-003	57.9482
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0328**	**0.1489**	**0.2905**	**1.2500e-003**	**0.0961**	**1.7100e-003**	**0.0979**	**0.0256**	**1.6300e-003**	**0.0273**		**131.0364**	**131.0364**	**4.8500e-003**	**0.0108**	**134.3596**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5971	6.4507	3.9335	0.0152		0.2465	0.2465		0.2268	0.2268	0.0000	1,472.3912	1,472.3912	0.4762		1,484.2962
Total	**0.5971**	**6.4507**	**3.9335**	**0.0152**		**0.2465**	**0.2465**		**0.2268**	**0.2268**	**0.0000**	**1,472.3912**	**1,472.3912**	**0.4762**		**1,484.2962**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.5900e-003	0.1299	0.0316	5.0000e-004	0.0140	1.2500e-003	0.0152	3.8400e-003	1.2000e-003	5.0300e-003		55.2656	55.2656	2.6600e-003	8.7800e-003	57.9482
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0328**	**0.1489**	**0.2905**	**1.2500e-003**	**0.0961**	**1.7100e-003**	**0.0979**	**0.0256**	**1.6300e-003**	**0.0273**		**131.0364**	**131.0364**	**4.8500e-003**	**0.0108**	**134.3596**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5665	5.8551	3.8673	0.0152		0.2254	0.2254		0.2073	0.2073		1,474.2225	1,474.2225	0.4768		1,486.1423
Total	**0.5665**	**5.8551**	**3.8673**	**0.0152**		**0.2254**	**0.2254**		**0.2073**	**0.2073**		**1,474.2225**	**1,474.2225**	**0.4768**		**1,486.1423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0288	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9022	52.9022	2.6700e-003	8.4100e-003	55.4759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0170	0.2400	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		73.3664	73.3664	1.9900e-003	1.8300e-003	73.9611
Total	**0.0291**	**0.1216**	**0.2687**	**1.2100e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**126.2686**	**126.2686**	**4.6600e-003**	**0.0102**	**129.4370**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5665	5.8551	3.8673	0.0152		0.2254	0.2254		0.2073	0.2073	0.0000	1,474.2225	1,474.2225	0.4768		1,486.1423
Total	**0.5665**	**5.8551**	**3.8673**	**0.0152**		**0.2254**	**0.2254**		**0.2073**	**0.2073**	**0.0000**	**1,474.2225**	**1,474.2225**	**0.4768**		**1,486.1423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0288	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9022	52.9022	2.6700e-003	8.4100e-003	55.4759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0170	0.2400	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		73.3664	73.3664	1.9900e-003	1.8300e-003	73.9611
Total	**0.0291**	**0.1216**	**0.2687**	**1.2100e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**126.2686**	**126.2686**	**4.6600e-003**	**0.0102**	**129.4370**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Demolition - Pier 1 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447		1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**		**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8300e-003	0.1061	0.0298	4.8000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.8000e-003		53.1521	53.1521	2.8100e-003	8.4600e-003	55.7430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0153	0.2239	7.0000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9559	70.9559	1.8100e-003	1.7100e-003	71.5104
Total	**0.0275**	**0.1214**	**0.2537**	**1.1800e-003**	**0.0965**	**1.3300e-003**	**0.0978**	**0.0257**	**1.2600e-003**	**0.0270**		**124.1079**	**124.1079**	**4.6200e-003**	**0.0102**	**127.2535**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Demolition - Pier 1 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447	0.0000	1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**	**0.0000**	**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8300e-003	0.1061	0.0298	4.8000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.8000e-003		53.1521	53.1521	2.8100e-003	8.4600e-003	55.7430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0153	0.2239	7.0000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9559	70.9559	1.8100e-003	1.7100e-003	71.5104
Total	**0.0275**	**0.1214**	**0.2537**	**1.1800e-003**	**0.0965**	**1.3300e-003**	**0.0978**	**0.0257**	**1.2600e-003**	**0.0270**		**124.1079**	**124.1079**	**4.6200e-003**	**0.0102**	**127.2535**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Construction - Pier 4, Phase 1 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802		1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**		**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9700e-003	0.1137	0.0329	5.1000e-004	0.0156	9.9000e-004	0.0165	4.2600e-003	9.5000e-004	5.2100e-003		56.5743	56.5743	3.1500e-003	9.0100e-003	59.3382
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
Total	**0.0261**	**0.1275**	**0.2424**	**1.1900e-003**	**0.0977**	**1.3900e-003**	**0.0991**	**0.0261**	**1.3200e-003**	**0.0274**		**125.1100**	**125.1100**	**4.8000e-003**	**0.0106**	**128.3932**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Construction - Pier 4, Phase 1 - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802	0.0000	1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**	**0.0000**	**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9700e-003	0.1137	0.0329	5.1000e-004	0.0156	9.9000e-004	0.0165	4.2600e-003	9.5000e-004	5.2100e-003		56.5743	56.5743	3.1500e-003	9.0100e-003	59.3382
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
Total	**0.0261**	**0.1275**	**0.2424**	**1.1900e-003**	**0.0977**	**1.3900e-003**	**0.0991**	**0.0261**	**1.3200e-003**	**0.0274**		**125.1100**	**125.1100**	**4.8000e-003**	**0.0106**	**128.3932**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447		1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**		**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8300e-003	0.1061	0.0298	4.8000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.8000e-003		53.1521	53.1521	2.8100e-003	8.4600e-003	55.7430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0153	0.2239	7.0000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9559	70.9559	1.8100e-003	1.7100e-003	71.5104
Total	**0.0275**	**0.1214**	**0.2537**	**1.1800e-003**	**0.0965**	**1.3300e-003**	**0.0978**	**0.0257**	**1.2600e-003**	**0.0270**		**124.1079**	**124.1079**	**4.6200e-003**	**0.0102**	**127.2535**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447	0.0000	1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**	**0.0000**	**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8300e-003	0.1061	0.0298	4.8000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.8000e-003		53.1521	53.1521	2.8100e-003	8.4600e-003	55.7430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0153	0.2239	7.0000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9559	70.9559	1.8100e-003	1.7100e-003	71.5104
Total	**0.0275**	**0.1214**	**0.2537**	**1.1800e-003**	**0.0965**	**1.3300e-003**	**0.0978**	**0.0257**	**1.2600e-003**	**0.0270**		**124.1079**	**124.1079**	**4.6200e-003**	**0.0102**	**127.2535**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6079	5.4372	5.3813	0.0120		0.2275	0.2275		0.2167	0.2167		1,151.4919	1,151.4919	0.2068		1,156.6621
Total	**0.6079**	**5.4372**	**5.3813**	**0.0120**		**0.2275**	**0.2275**		**0.2167**	**0.2167**		**1,151.4919**	**1,151.4919**	**0.2068**		**1,156.6621**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0302	4.7000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.7900e-003		52.0741	52.0741	2.9000e-003	8.2900e-003	54.6181
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
Total	**0.0260**	**0.1185**	**0.2398**	**1.1500e-003**	**0.0965**	**1.3100e-003**	**0.0978**	**0.0257**	**1.2400e-003**	**0.0270**		**120.6098**	**120.6098**	**4.5500e-003**	**9.8900e-003**	**123.6732**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6079	5.4372	5.3813	0.0120		0.2275	0.2275		0.2167	0.2167	0.0000	1,151.4919	1,151.4919	0.2068		1,156.6621
Total	**0.6079**	**5.4372**	**5.3813**	**0.0120**		**0.2275**	**0.2275**		**0.2167**	**0.2167**	**0.0000**	**1,151.4919**	**1,151.4919**	**0.2068**		**1,156.6621**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0302	4.7000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.7900e-003		52.0741	52.0741	2.9000e-003	8.2900e-003	54.6181
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
Total	**0.0260**	**0.1185**	**0.2398**	**1.1500e-003**	**0.0965**	**1.3100e-003**	**0.0978**	**0.0257**	**1.2400e-003**	**0.0270**		**120.6098**	**120.6098**	**4.5500e-003**	**9.8900e-003**	**123.6732**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.8 Demolition - Pier 7 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6079	5.4372	5.3813	0.0120		0.2275	0.2275		0.2167	0.2167		1,151.4919	1,151.4919	0.2068		1,156.6621
Total	**0.6079**	**5.4372**	**5.3813**	**0.0120**		**0.2275**	**0.2275**		**0.2167**	**0.2167**		**1,151.4919**	**1,151.4919**	**0.2068**		**1,156.6621**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0302	4.7000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.7900e-003		52.0741	52.0741	2.9000e-003	8.2900e-003	54.6181
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
Total	**0.0260**	**0.1185**	**0.2398**	**1.1500e-003**	**0.0965**	**1.3100e-003**	**0.0978**	**0.0257**	**1.2400e-003**	**0.0270**		**120.6098**	**120.6098**	**4.5500e-003**	**9.8900e-003**	**123.6732**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.8 Demolition - Pier 7 - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6079	5.4372	5.3813	0.0120		0.2275	0.2275		0.2167	0.2167	0.0000	1,151.4919	1,151.4919	0.2068		1,156.6621
Total	**0.6079**	**5.4372**	**5.3813**	**0.0120**		**0.2275**	**0.2275**		**0.2167**	**0.2167**	**0.0000**	**1,151.4919**	**1,151.4919**	**0.2068**		**1,156.6621**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0302	4.7000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.7900e-003		52.0741	52.0741	2.9000e-003	8.2900e-003	54.6181
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
Total	**0.0260**	**0.1185**	**0.2398**	**1.1500e-003**	**0.0965**	**1.3100e-003**	**0.0978**	**0.0257**	**1.2400e-003**	**0.0270**		**120.6098**	**120.6098**	**4.5500e-003**	**9.8900e-003**	**123.6732**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.9 Quay Wall Concrete Cap - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6556	5.5057	7.4506	0.0132		0.2697	0.2697		0.2697	0.2697		1,246.0691	1,246.0691	0.0570		1,247.4944
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6556**	**5.5057**	**7.4506**	**0.0132**		**0.2697**	**0.2697**		**0.2697**	**0.2697**		**1,246.0691**	**1,246.0691**	**0.0570**		**1,247.4944**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0288	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9022	52.9022	2.6700e-003	8.4100e-003	55.4759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0170	0.2400	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		73.3664	73.3664	1.9900e-003	1.8300e-003	73.9611
Total	**0.0291**	**0.1216**	**0.2687**	**1.2100e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**126.2686**	**126.2686**	**4.6600e-003**	**0.0102**	**129.4370**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.9 Quay Wall Concrete Cap - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6556	5.5057	7.4506	0.0132		0.2697	0.2697		0.2697	0.2697	0.0000	1,246.0691	1,246.0691	0.0570		1,247.4944
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6556**	**5.5057**	**7.4506**	**0.0132**		**0.2697**	**0.2697**		**0.2697**	**0.2697**	**0.0000**	**1,246.0691**	**1,246.0691**	**0.0570**		**1,247.4944**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8100e-003	0.1047	0.0288	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9022	52.9022	2.6700e-003	8.4100e-003	55.4759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0170	0.2400	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		73.3664	73.3664	1.9900e-003	1.8300e-003	73.9611
Total	**0.0291**	**0.1216**	**0.2687**	**1.2100e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**126.2686**	**126.2686**	**4.6600e-003**	**0.0102**	**129.4370**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802		1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**		**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7900e-003	0.1034	0.0299	4.6000e-004	0.0141	9.0000e-004	0.0150	3.8800e-003	8.6000e-004	4.7400e-003		51.4585	51.4585	2.8700e-003	8.2000e-003	53.9725
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
Total	**0.0260**	**0.1172**	**0.2395**	**1.1400e-003**	**0.0963**	**1.3000e-003**	**0.0976**	**0.0257**	**1.2300e-003**	**0.0269**		**119.9942**	**119.9942**	**4.5200e-003**	**9.8000e-003**	**123.0276**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802	0.0000	1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**	**0.0000**	**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7900e-003	0.1034	0.0299	4.6000e-004	0.0141	9.0000e-004	0.0150	3.8800e-003	8.6000e-004	4.7400e-003		51.4585	51.4585	2.8700e-003	8.2000e-003	53.9725
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
Total	**0.0260**	**0.1172**	**0.2395**	**1.1400e-003**	**0.0963**	**1.3000e-003**	**0.0976**	**0.0257**	**1.2300e-003**	**0.0269**		**119.9942**	**119.9942**	**4.5200e-003**	**9.8000e-003**	**123.0276**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802		1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**		**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7700e-003	0.1018	0.0303	4.5000e-004	0.0141	8.9000e-004	0.0150	3.8800e-003	8.5000e-004	4.7300e-003		50.3843	50.3843	2.9500e-003	8.0300e-003	52.8512
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0228	0.0126	0.1974	6.6000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		66.3897	66.3897	1.5100e-003	1.5200e-003	66.8794
Total	**0.0246**	**0.1144**	**0.2277**	**1.1100e-003**	**0.0963**	**1.2700e-003**	**0.0976**	**0.0257**	**1.2000e-003**	**0.0269**		**116.7740**	**116.7740**	**4.4600e-003**	**9.5500e-003**	**119.7306**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802	0.0000	1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**	**0.0000**	**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7700e-003	0.1018	0.0303	4.5000e-004	0.0141	8.9000e-004	0.0150	3.8800e-003	8.5000e-004	4.7300e-003		50.3843	50.3843	2.9500e-003	8.0300e-003	52.8512
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0228	0.0126	0.1974	6.6000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		66.3897	66.3897	1.5100e-003	1.5200e-003	66.8794
Total	**0.0246**	**0.1144**	**0.2277**	**1.1100e-003**	**0.0963**	**1.2700e-003**	**0.0976**	**0.0257**	**1.2000e-003**	**0.0269**		**116.7740**	**116.7740**	**4.4600e-003**	**9.5500e-003**	**119.7306**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Unmitigated	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	**7.0000e-005**	**1.0000e-005**	**7.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.5300e-003**	**1.5300e-003**	**0.0000**		**1.6300e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	**7.0000e-005**	**1.0000e-005**	**7.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.5300e-003**	**1.5300e-003**	**0.0000**		**1.6300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Addendum to HII Wharf Repair Project

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	7.00	User Defined Unit	2.59	112,831.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Area of existing piers and wharfs.

Construction Phase - Based on project description for updated project.

Off-road Equipment - Based on project description for updated project.

Off-road Equipment - Based on project description for updated project.

Off-road Equipment - Based on project description for updated project.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Off-road Equipment - Based on updated project description.

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-road Equipment - Based on updated project description.

Trips and VMT - Based on updated project description.

On-road Fugitive Dust - CalEEMod defaults.

Demolition - Based on updated project description.

Vehicle Trips - Construction only.

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	220.00	30.00
tblConstructionPhase	NumDays	220.00	9.00
tblConstructionPhase	NumDays	220.00	141.00
tblConstructionPhase	NumDays	20.00	140.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	35.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblLandscapeEquipment	NumberSummerDays	180	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LandUseSquareFeet	0.00	112,831.00
tblLandUse	LotAcreage	0.00	2.59
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	112.00
tblTripsAndVMT	HaulingTripNumber	2.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	HaulingTripNumber	0.00	28.00
tblTripsAndVMT	HaulingTripNumber	0.00	114.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	3.00	10.00
tblTripsAndVMT	WorkerTripNumber	47.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	47.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	47.00	10.00

2.0 Emissions Summary

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.6322	6.6069	4.2110	0.0164	0.1232	0.2482	0.3443	0.0297	0.2284	0.2540	0.0000	1,599.2748	1,599.2748	0.4812	0.0109	1,614.5555
2023	0.7165	6.5277	7.7077	0.0164	0.0961	0.2889	0.3851	0.0256	0.2761	0.3017	0.0000	1,596.5100	1,596.5100	0.4816	0.0104	1,611.6483
2024	0.6742	6.0461	5.6681	0.0132	0.0965	0.2577	0.3542	0.0257	0.2460	0.2717	0.0000	1,271.7413	1,271.7413	0.2136	0.0103	1,280.1560
2025	0.6360	5.5617	5.6118	0.0164	0.0977	0.2288	0.3253	0.0261	0.2179	0.2437	0.0000	1,597.4923	1,597.4923	0.4823	0.0108	1,612.7546
2026	0.5487	5.1535	3.9919	0.0163	0.0963	0.1972	0.2935	0.0257	0.1814	0.2071	0.0000	1,589.2733	1,589.2733	0.4820	9.6800e-003	1,604.2064
Maximum	**0.7165**	**6.6069**	**7.7077**	**0.0164**	**0.1232**	**0.2889**	**0.3851**	**0.0297**	**0.2761**	**0.3017**	**0.0000**	**1,599.2748**	**1,599.2748**	**0.4823**	**0.0109**	**1,614.5555**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.6322	6.6069	4.2110	0.0164	0.1232	0.2482	0.3443	0.0297	0.2284	0.2540	0.0000	1,599.2748	1,599.2748	0.4812	0.0109	1,614.5555
2023	0.7165	6.5277	7.7077	0.0164	0.0961	0.2889	0.3851	0.0256	0.2761	0.3017	0.0000	1,596.5100	1,596.5100	0.4816	0.0104	1,611.6483
2024	0.6742	6.0461	5.6681	0.0132	0.0965	0.2577	0.3542	0.0257	0.2460	0.2717	0.0000	1,271.7413	1,271.7413	0.2136	0.0103	1,280.1560
2025	0.6360	5.5617	5.6118	0.0164	0.0977	0.2288	0.3253	0.0261	0.2179	0.2437	0.0000	1,597.4923	1,597.4923	0.4823	0.0108	1,612.7546
2026	0.5487	5.1535	3.9919	0.0163	0.0963	0.1972	0.2935	0.0257	0.1814	0.2071	0.0000	1,589.2733	1,589.2733	0.4820	9.6800e-003	1,604.2064
Maximum	**0.7165**	**6.6069**	**7.7077**	**0.0164**	**0.1232**	**0.2889**	**0.3851**	**0.0297**	**0.2761**	**0.3017**	**0.0000**	**1,599.2748**	**1,599.2748**	**0.4823**	**0.0109**	**1,614.5555**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0000e-005**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.5300e-003**	**1.5300e-003**	**0.0000**	**0.0000**	**1.6300e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0000e-005**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.5300e-003**	**1.5300e-003**	**0.0000**	**0.0000**	**1.6300e-003**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Pier 4/Wharf 4	Demolition	9/15/2023	3/28/2024	5	140	
2	Quay Wall Rubble Removal	Demolition	12/1/2022	12/28/2022	5	20	
3	Quay Wall Reinforcement	Building Construction	12/29/2022	2/8/2023	5	30	
4	Demolition - Pier 1	Demolition	9/15/2024	11/14/2024	5	44	
5	Construction - Pier 4, Phase 1	Building Construction	3/19/2025	3/31/2025	5	9	
6	Demolition - Pier 5	Demolition	11/15/2024	1/15/2025	5	44	
7	Demolition - Pier 7	Demolition	1/16/2025	3/18/2025	5	44	
8	Quay Wall Concrete Cap	Paving	2/9/2023	3/29/2023	5	35	
9	Construction - Pier 4, Phase 2	Building Construction	9/15/2025	3/30/2026	5	141	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Pier 4/Wharf 4	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 4/Wharf 4	Cranes	1	8.00	231	0.29

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - Pier 4/Wharf 4	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 4/Wharf 4	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Quay Wall Rubble Removal	Concrete/Industrial Saws	0	8.00	81	0.73
Quay Wall Rubble Removal	Excavators	1	8.00	158	0.38
Quay Wall Rubble Removal	Rubber Tired Dozers	0	8.00	247	0.40
Quay Wall Rubble Removal	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Quay Wall Reinforcement	Bore/Drill Rigs	1	8.00	221	0.50
Quay Wall Reinforcement	Cranes	1	8.00	231	0.29
Quay Wall Reinforcement	Forklifts	0	7.00	89	0.20
Quay Wall Reinforcement	Generator Sets	0	8.00	84	0.74
Quay Wall Reinforcement	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Quay Wall Reinforcement	Welders	0	8.00	46	0.45
Demolition - Pier 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 1	Cranes	1	8.00	231	0.29
Demolition - Pier 1	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 1	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Construction - Pier 4, Phase 1	Bore/Drill Rigs	1	8.00	221	0.50
Construction - Pier 4, Phase 1	Cranes	1	8.00	231	0.29
Construction - Pier 4, Phase 1	Forklifts	0	7.00	89	0.20
Construction - Pier 4, Phase 1	Generator Sets	0	8.00	84	0.74
Construction - Pier 4, Phase 1	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Construction - Pier 4, Phase 1	Welders	0	8.00	46	0.45
Demolition - Pier 5	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 5	Cranes	1	8.00	231	0.29
Demolition - Pier 5	Rubber Tired Dozers	0	8.00	247	0.40
Demolition - Pier 5	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition - Pier 7	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Pier 7	Cranes	1	8.00	231	0.29
Demolition - Pier 7	Rubber Tired Dozers	0	8.00	247	0.40

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - Pier 7	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Quay Wall Concrete Cap	Cement and Mortar Mixers	0	8.00	9	0.56
Quay Wall Concrete Cap	Pavers	0	8.00	130	0.42
Quay Wall Concrete Cap	Paving Equipment	0	8.00	132	0.36
Quay Wall Concrete Cap	Pumps	2	8.00	84	0.74
Quay Wall Concrete Cap	Rollers	0	8.00	80	0.38
Quay Wall Concrete Cap	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Construction - Pier 4, Phase 2	Bore/Drill Rigs	1	8.00	221	0.50
Construction - Pier 4, Phase 2	Cranes	1	8.00	231	0.29

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Pier 4/Wharf 4	2	10.00	0.00	112.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Quay Wall Rubble Removal	1	10.00	0.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Quay Wall Reinforcement	2	10.00	0.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Pier 1	2	10.00	0.00	36.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Construction - Pier 4, Phase 1	2	10.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Pier 5	2	10.00	0.00	36.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Pier 7	2	10.00	0.00	36.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Quay Wall Concrete Cap	2	10.00	0.00	28.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Construction - Pier 4, Phase 2	2	10.00	0.00	114.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6851	6.3998	5.4918	0.0120		0.2876	0.2876		0.2749	0.2749		1,151.4849	1,151.4849	0.2099		1,156.7333
Total	**0.6851**	**6.3998**	**5.4918**	**0.0120**		**0.2876**	**0.2876**		**0.2749**	**0.2749**		**1,151.4849**	**1,151.4849**	**0.2099**		**1,156.7333**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0291	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9536	52.9536	2.6600e-003	8.4200e-003	55.5296
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0191	0.2281	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		69.3339	69.3339	2.1200e-003	1.9800e-003	69.9763
Total	**0.0313**	**0.1280**	**0.2572**	**1.1700e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**122.2875**	**122.2875**	**4.7800e-003**	**0.0104**	**125.5059**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6851	6.3998	5.4918	0.0120		0.2876	0.2876		0.2749	0.2749	0.0000	1,151.4849	1,151.4849	0.2099		1,156.7333
Total	**0.6851**	**6.3998**	**5.4918**	**0.0120**		**0.2876**	**0.2876**		**0.2749**	**0.2749**	**0.0000**	**1,151.4849**	**1,151.4849**	**0.2099**		**1,156.7333**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0291	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9536	52.9536	2.6600e-003	8.4200e-003	55.5296
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0191	0.2281	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		69.3339	69.3339	2.1200e-003	1.9800e-003	69.9763
Total	**0.0313**	**0.1280**	**0.2572**	**1.1700e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**122.2875**	**122.2875**	**4.7800e-003**	**0.0104**	**125.5059**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447		1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**		**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6800e-003	0.1079	0.0295	4.7000e-004	0.0140	9.0000e-004	0.0149	3.8400e-003	8.6000e-004	4.6900e-003		52.0223	52.0223	2.7400e-003	8.2800e-003	54.5581
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0279	0.0172	0.2132	6.6000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		67.0647	67.0647	1.9300e-003	1.8500e-003	67.6637
Total	**0.0296**	**0.1251**	**0.2427**	**1.1300e-003**	**0.0961**	**1.3200e-003**	**0.0975**	**0.0256**	**1.2500e-003**	**0.0269**		**119.0870**	**119.0870**	**4.6700e-003**	**0.0101**	**122.2218**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - Pier 4/Wharf 4 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447	0.0000	1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**	**0.0000**	**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6800e-003	0.1079	0.0295	4.7000e-004	0.0140	9.0000e-004	0.0149	3.8400e-003	8.6000e-004	4.6900e-003		52.0223	52.0223	2.7400e-003	8.2800e-003	54.5581
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0279	0.0172	0.2132	6.6000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		67.0647	67.0647	1.9300e-003	1.8500e-003	67.6637
Total	**0.0296**	**0.1251**	**0.2427**	**1.1300e-003**	**0.0961**	**1.3200e-003**	**0.0975**	**0.0256**	**1.2500e-003**	**0.0269**		**119.0870**	**119.0870**	**4.6700e-003**	**0.0101**	**122.2218**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Quay Wall Rubble Removal - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0271	0.0000	0.0271	4.1000e-003	0.0000	4.1000e-003			0.0000			0.0000
Off-Road	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790		500.0153	500.0153	0.1617		504.0582
Total	**0.2024**	**1.7770**	**3.2551**	**5.1700e-003**	**0.0271**	**0.0859**	**0.1130**	**4.1000e-003**	**0.0790**	**0.0831**		**500.0153**	**500.0153**	**0.1617**		**504.0582**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4900e-003	0.1348	0.0321	5.0000e-004	0.0140	1.2500e-003	0.0153	3.8400e-003	1.2000e-003	5.0300e-003		55.2890	55.2890	2.6500e-003	8.7800e-003	57.9727
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0351**	**0.1562**	**0.2776**	**1.2100e-003**	**0.0961**	**1.7100e-003**	**0.0979**	**0.0256**	**1.6300e-003**	**0.0273**		**126.8836**	**126.8836**	**4.9800e-003**	**0.0109**	**130.2593**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Quay Wall Rubble Removal - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0271	0.0000	0.0271	4.1000e-003	0.0000	4.1000e-003			0.0000			0.0000
Off-Road	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790	0.0000	500.0153	500.0153	0.1617		504.0582
Total	**0.2024**	**1.7770**	**3.2551**	**5.1700e-003**	**0.0271**	**0.0859**	**0.1130**	**4.1000e-003**	**0.0790**	**0.0831**	**0.0000**	**500.0153**	**500.0153**	**0.1617**		**504.0582**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4900e-003	0.1348	0.0321	5.0000e-004	0.0140	1.2500e-003	0.0153	3.8400e-003	1.2000e-003	5.0300e-003		55.2890	55.2890	2.6500e-003	8.7800e-003	57.9727
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0351**	**0.1562**	**0.2776**	**1.2100e-003**	**0.0961**	**1.7100e-003**	**0.0979**	**0.0256**	**1.6300e-003**	**0.0273**		**126.8836**	**126.8836**	**4.9800e-003**	**0.0109**	**130.2593**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5971	6.4507	3.9335	0.0152		0.2465	0.2465		0.2268	0.2268		1,472.3912	1,472.3912	0.4762		1,484.2962
Total	**0.5971**	**6.4507**	**3.9335**	**0.0152**		**0.2465**	**0.2465**		**0.2268**	**0.2268**		**1,472.3912**	**1,472.3912**	**0.4762**		**1,484.2962**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4900e-003	0.1348	0.0321	5.0000e-004	0.0140	1.2500e-003	0.0153	3.8400e-003	1.2000e-003	5.0300e-003		55.2890	55.2890	2.6500e-003	8.7800e-003	57.9727
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0351**	**0.1562**	**0.2776**	**1.2100e-003**	**0.0961**	**1.7100e-003**	**0.0979**	**0.0256**	**1.6300e-003**	**0.0273**		**126.8836**	**126.8836**	**4.9800e-003**	**0.0109**	**130.2593**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5971	6.4507	3.9335	0.0152		0.2465	0.2465		0.2268	0.2268	0.0000	1,472.3912	1,472.3912	0.4762		1,484.2962
Total	**0.5971**	**6.4507**	**3.9335**	**0.0152**		**0.2465**	**0.2465**		**0.2268**	**0.2268**	**0.0000**	**1,472.3912**	**1,472.3912**	**0.4762**		**1,484.2962**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4900e-003	0.1348	0.0321	5.0000e-004	0.0140	1.2500e-003	0.0153	3.8400e-003	1.2000e-003	5.0300e-003		55.2890	55.2890	2.6500e-003	8.7800e-003	57.9727
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0351**	**0.1562**	**0.2776**	**1.2100e-003**	**0.0961**	**1.7100e-003**	**0.0979**	**0.0256**	**1.6300e-003**	**0.0273**		**126.8836**	**126.8836**	**4.9800e-003**	**0.0109**	**130.2593**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5665	5.8551	3.8673	0.0152		0.2254	0.2254		0.2073	0.2073		1,474.2225	1,474.2225	0.4768		1,486.1423
Total	**0.5665**	**5.8551**	**3.8673**	**0.0152**		**0.2254**	**0.2254**		**0.2073**	**0.2073**		**1,474.2225**	**1,474.2225**	**0.4768**		**1,486.1423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0291	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9536	52.9536	2.6600e-003	8.4200e-003	55.5296
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0191	0.2281	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		69.3339	69.3339	2.1200e-003	1.9800e-003	69.9763
Total	**0.0313**	**0.1280**	**0.2572**	**1.1700e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**122.2875**	**122.2875**	**4.7800e-003**	**0.0104**	**125.5059**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Quay Wall Reinforcement - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5665	5.8551	3.8673	0.0152		0.2254	0.2254		0.2073	0.2073	0.0000	1,474.2225	1,474.2225	0.4768		1,486.1423
Total	**0.5665**	**5.8551**	**3.8673**	**0.0152**		**0.2254**	**0.2254**		**0.2073**	**0.2073**	**0.0000**	**1,474.2225**	**1,474.2225**	**0.4768**		**1,486.1423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0291	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9536	52.9536	2.6600e-003	8.4200e-003	55.5296
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0191	0.2281	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		69.3339	69.3339	2.1200e-003	1.9800e-003	69.9763
Total	**0.0313**	**0.1280**	**0.2572**	**1.1700e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**122.2875**	**122.2875**	**4.7800e-003**	**0.0104**	**125.5059**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Demolition - Pier 1 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447		1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**		**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7200e-003	0.1104	0.0302	4.8000e-004	0.0143	9.2000e-004	0.0152	3.9200e-003	8.8000e-004	4.8000e-003		53.2046	53.2046	2.8000e-003	8.4700e-003	55.7981
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0279	0.0172	0.2132	6.6000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		67.0647	67.0647	1.9300e-003	1.8500e-003	67.6637
Total	**0.0296**	**0.1276**	**0.2434**	**1.1400e-003**	**0.0965**	**1.3400e-003**	**0.0978**	**0.0257**	**1.2700e-003**	**0.0270**		**120.2694**	**120.2694**	**4.7300e-003**	**0.0103**	**123.4618**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Demolition - Pier 1 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447	0.0000	1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**	**0.0000**	**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7200e-003	0.1104	0.0302	4.8000e-004	0.0143	9.2000e-004	0.0152	3.9200e-003	8.8000e-004	4.8000e-003		53.2046	53.2046	2.8000e-003	8.4700e-003	55.7981
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0279	0.0172	0.2132	6.6000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		67.0647	67.0647	1.9300e-003	1.8500e-003	67.6637
Total	**0.0296**	**0.1276**	**0.2434**	**1.1400e-003**	**0.0965**	**1.3400e-003**	**0.0978**	**0.0257**	**1.2700e-003**	**0.0270**		**120.2694**	**120.2694**	**4.7300e-003**	**0.0103**	**123.4618**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Construction - Pier 4, Phase 1 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802		1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**		**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8500e-003	0.1183	0.0333	5.1000e-004	0.0156	9.9000e-004	0.0165	4.2600e-003	9.5000e-004	5.2100e-003		56.6311	56.6311	3.1400e-003	9.0200e-003	59.3977
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
Total	**0.0282**	**0.1338**	**0.2331**	**1.1500e-003**	**0.0977**	**1.3900e-003**	**0.0991**	**0.0261**	**1.3200e-003**	**0.0274**		**121.4158**	**121.4158**	**4.9000e-003**	**0.0108**	**124.7433**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Construction - Pier 4, Phase 1 - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802	0.0000	1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**	**0.0000**	**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8500e-003	0.1183	0.0333	5.1000e-004	0.0156	9.9000e-004	0.0165	4.2600e-003	9.5000e-004	5.2100e-003		56.6311	56.6311	3.1400e-003	9.0200e-003	59.3977
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
Total	**0.0282**	**0.1338**	**0.2331**	**1.1500e-003**	**0.0977**	**1.3900e-003**	**0.0991**	**0.0261**	**1.3200e-003**	**0.0274**		**121.4158**	**121.4158**	**4.9000e-003**	**0.0108**	**124.7433**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447		1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**		**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7200e-003	0.1104	0.0302	4.8000e-004	0.0143	9.2000e-004	0.0152	3.9200e-003	8.8000e-004	4.8000e-003		53.2046	53.2046	2.8000e-003	8.4700e-003	55.7981
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0279	0.0172	0.2132	6.6000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		67.0647	67.0647	1.9300e-003	1.8500e-003	67.6637
Total	**0.0296**	**0.1276**	**0.2434**	**1.1400e-003**	**0.0965**	**1.3400e-003**	**0.0978**	**0.0257**	**1.2700e-003**	**0.0270**		**120.2694**	**120.2694**	**4.7300e-003**	**0.0103**	**123.4618**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	5.9185	5.4248	0.0120		0.2564	0.2564		0.2447	0.2447	0.0000	1,151.4720	1,151.4720	0.2089		1,156.6942
Total	**0.6446**	**5.9185**	**5.4248**	**0.0120**		**0.2564**	**0.2564**		**0.2447**	**0.2447**	**0.0000**	**1,151.4720**	**1,151.4720**	**0.2089**		**1,156.6942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7200e-003	0.1104	0.0302	4.8000e-004	0.0143	9.2000e-004	0.0152	3.9200e-003	8.8000e-004	4.8000e-003		53.2046	53.2046	2.8000e-003	8.4700e-003	55.7981
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0279	0.0172	0.2132	6.6000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		67.0647	67.0647	1.9300e-003	1.8500e-003	67.6637
Total	**0.0296**	**0.1276**	**0.2434**	**1.1400e-003**	**0.0965**	**1.3400e-003**	**0.0978**	**0.0257**	**1.2700e-003**	**0.0270**		**120.2694**	**120.2694**	**4.7300e-003**	**0.0103**	**123.4618**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6079	5.4372	5.3813	0.0120		0.2275	0.2275		0.2167	0.2167		1,151.4919	1,151.4919	0.2068		1,156.6621
Total	**0.6079**	**5.4372**	**5.3813**	**0.0120**		**0.2275**	**0.2275**		**0.2167**	**0.2167**		**1,151.4919**	**1,151.4919**	**0.2068**		**1,156.6621**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0306	4.7000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.8000e-003		52.1264	52.1264	2.8900e-003	8.3000e-003	54.6728
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
Total	**0.0280**	**0.1244**	**0.2305**	**1.1100e-003**	**0.0965**	**1.3100e-003**	**0.0978**	**0.0257**	**1.2400e-003**	**0.0270**		**116.9111**	**116.9111**	**4.6500e-003**	**0.0100**	**120.0185**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Demolition - Pier 5 - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6079	5.4372	5.3813	0.0120		0.2275	0.2275		0.2167	0.2167	0.0000	1,151.4919	1,151.4919	0.2068		1,156.6621
Total	**0.6079**	**5.4372**	**5.3813**	**0.0120**		**0.2275**	**0.2275**		**0.2167**	**0.2167**	**0.0000**	**1,151.4919**	**1,151.4919**	**0.2068**		**1,156.6621**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0306	4.7000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.8000e-003		52.1264	52.1264	2.8900e-003	8.3000e-003	54.6728
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
Total	**0.0280**	**0.1244**	**0.2305**	**1.1100e-003**	**0.0965**	**1.3100e-003**	**0.0978**	**0.0257**	**1.2400e-003**	**0.0270**		**116.9111**	**116.9111**	**4.6500e-003**	**0.0100**	**120.0185**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.8 Demolition - Pier 7 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6079	5.4372	5.3813	0.0120		0.2275	0.2275		0.2167	0.2167		1,151.4919	1,151.4919	0.2068		1,156.6621
Total	**0.6079**	**5.4372**	**5.3813**	**0.0120**		**0.2275**	**0.2275**		**0.2167**	**0.2167**		**1,151.4919**	**1,151.4919**	**0.2068**		**1,156.6621**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0306	4.7000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.8000e-003		52.1264	52.1264	2.8900e-003	8.3000e-003	54.6728
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
Total	**0.0280**	**0.1244**	**0.2305**	**1.1100e-003**	**0.0965**	**1.3100e-003**	**0.0978**	**0.0257**	**1.2400e-003**	**0.0270**		**116.9111**	**116.9111**	**4.6500e-003**	**0.0100**	**120.0185**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.8 Demolition - Pier 7 - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6079	5.4372	5.3813	0.0120		0.2275	0.2275		0.2167	0.2167	0.0000	1,151.4919	1,151.4919	0.2068		1,156.6621
Total	**0.6079**	**5.4372**	**5.3813**	**0.0120**		**0.2275**	**0.2275**		**0.2167**	**0.2167**	**0.0000**	**1,151.4919**	**1,151.4919**	**0.2068**		**1,156.6621**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0306	4.7000e-004	0.0143	9.1000e-004	0.0152	3.9200e-003	8.7000e-004	4.8000e-003		52.1264	52.1264	2.8900e-003	8.3000e-003	54.6728
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
Total	**0.0280**	**0.1244**	**0.2305**	**1.1100e-003**	**0.0965**	**1.3100e-003**	**0.0978**	**0.0257**	**1.2400e-003**	**0.0270**		**116.9111**	**116.9111**	**4.6500e-003**	**0.0100**	**120.0185**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.9 Quay Wall Concrete Cap - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6556	5.5057	7.4506	0.0132		0.2697	0.2697		0.2697	0.2697		1,246.0691	1,246.0691	0.0570		1,247.4944
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6556**	**5.5057**	**7.4506**	**0.0132**		**0.2697**	**0.2697**		**0.2697**	**0.2697**		**1,246.0691**	**1,246.0691**	**0.0570**		**1,247.4944**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0291	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9536	52.9536	2.6600e-003	8.4200e-003	55.5296
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0191	0.2281	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		69.3339	69.3339	2.1200e-003	1.9800e-003	69.9763
Total	**0.0313**	**0.1280**	**0.2572**	**1.1700e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**122.2875**	**122.2875**	**4.7800e-003**	**0.0104**	**125.5059**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.9 Quay Wall Concrete Cap - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6556	5.5057	7.4506	0.0132		0.2697	0.2697		0.2697	0.2697	0.0000	1,246.0691	1,246.0691	0.0570		1,247.4944
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6556**	**5.5057**	**7.4506**	**0.0132**		**0.2697**	**0.2697**		**0.2697**	**0.2697**	**0.0000**	**1,246.0691**	**1,246.0691**	**0.0570**		**1,247.4944**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.1089	0.0291	4.8000e-004	0.0140	8.9000e-004	0.0149	3.8400e-003	8.5000e-004	4.6900e-003		52.9536	52.9536	2.6600e-003	8.4200e-003	55.5296
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0191	0.2281	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		69.3339	69.3339	2.1200e-003	1.9800e-003	69.9763
Total	**0.0313**	**0.1280**	**0.2572**	**1.1700e-003**	**0.0961**	**1.3300e-003**	**0.0975**	**0.0256**	**1.2600e-003**	**0.0269**		**122.2875**	**122.2875**	**4.7800e-003**	**0.0104**	**125.5059**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802		1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**		**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6800e-003	0.1076	0.0302	4.6000e-004	0.0141	9.0000e-004	0.0150	3.8800e-003	8.6000e-004	4.7400e-003		51.5102	51.5102	2.8600e-003	8.2000e-003	54.0266
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
Total	**0.0280**	**0.1231**	**0.2301**	**1.1000e-003**	**0.0963**	**1.3000e-003**	**0.0976**	**0.0257**	**1.2300e-003**	**0.0269**		**116.2949**	**116.2949**	**4.6200e-003**	**9.9300e-003**	**119.3723**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802	0.0000	1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**	**0.0000**	**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6800e-003	0.1076	0.0302	4.6000e-004	0.0141	9.0000e-004	0.0150	3.8800e-003	8.6000e-004	4.7400e-003		51.5102	51.5102	2.8600e-003	8.2000e-003	54.0266
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
Total	**0.0280**	**0.1231**	**0.2301**	**1.1000e-003**	**0.0963**	**1.3000e-003**	**0.0976**	**0.0257**	**1.2300e-003**	**0.0269**		**116.2949**	**116.2949**	**4.6200e-003**	**9.9300e-003**	**119.3723**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802		1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**		**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6600e-003	0.1060	0.0306	4.5000e-004	0.0141	8.9000e-004	0.0150	3.8800e-003	8.5000e-004	4.7300e-003		50.4357	50.4357	2.9400e-003	8.0400e-003	52.9050
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0249	0.0142	0.1885	6.2000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		62.7613	62.7613	1.6200e-003	1.6400e-003	63.2902
Total	**0.0266**	**0.1201**	**0.2191**	**1.0700e-003**	**0.0963**	**1.2700e-003**	**0.0976**	**0.0257**	**1.2000e-003**	**0.0269**		**113.1969**	**113.1969**	**4.5600e-003**	**9.6800e-003**	**116.1952**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.10 Construction - Pier 4, Phase 2 - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5221	5.0334	3.7727	0.0153		0.1959	0.1959		0.1802	0.1802	0.0000	1,476.0764	1,476.0764	0.4774		1,488.0112
Total	**0.5221**	**5.0334**	**3.7727**	**0.0153**		**0.1959**	**0.1959**		**0.1802**	**0.1802**	**0.0000**	**1,476.0764**	**1,476.0764**	**0.4774**		**1,488.0112**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6600e-003	0.1060	0.0306	4.5000e-004	0.0141	8.9000e-004	0.0150	3.8800e-003	8.5000e-004	4.7300e-003		50.4357	50.4357	2.9400e-003	8.0400e-003	52.9050
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0249	0.0142	0.1885	6.2000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		62.7613	62.7613	1.6200e-003	1.6400e-003	63.2902
Total	**0.0266**	**0.1201**	**0.2191**	**1.0700e-003**	**0.0963**	**1.2700e-003**	**0.0976**	**0.0257**	**1.2000e-003**	**0.0269**		**113.1969**	**113.1969**	**4.5600e-003**	**9.6800e-003**	**116.1952**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Unmitigated	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	**7.0000e-005**	**1.0000e-005**	**7.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.5300e-003**	**1.5300e-003**	**0.0000**		**1.6300e-003**

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	**7.0000e-005**	**1.0000e-005**	**7.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.5300e-003**	**1.5300e-003**	**0.0000**		**1.6300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Addendum to HII Wharf Repair Project - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation