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PORTofSANDIEGO

BAE Systems Waterfront Improvement Project Final Environmental Impact Report

Prepared for:

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UPD #EIR-2018-197; SCH #2019039040

FINAL ENVIRONMENTAL IMPACT REPORT BAE Systems Waterfront Improvement Project

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Acronyms and Abbreviations

ALUC	Airport Land Use Commission
AQIA	Air Quality Impact Analysis
BAE Systems	BAE Systems San Diego Ship Repair Inc.
BMPs	best management practices
Board	Board of Port Commissioners
CAO	Cleanup and Abatement Order
САР	Climate Action Plan
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
СЕМР	California Eelgrass Mitigation Policy
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFLs	Compact Fluorescent Lights
CG	Cruisers
City	City of San Diego
CNDDB	California Natural Diversity Database
Contamination Characterization Report	Site Contamination Characterization Report
County	County of San Diego
CWA	Clean Water Act
cy	cubic yards
DDG	Destroyers

Disposal Plan	Soil and Groundwater Disposal Plan
District	San Diego Unified Port District
DMP	Dredging Management Program
EFH	Essential Fish Habitat
ЕНС	Environmental Health Coalition
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
GHG	greenhouse gas
Health and Safety Plan	Health and Safety Plan for Dredging Activities
LCS	littoral combat ships
LED	light-emitting diode
LEED	Leadership in Energy and Environmental Design
LHD/LHA	amphibious assault ships
MLLW	Mean Lower Low Water
MMRP	Mitigation Monitoring and Reporting Program
MSC	Military Sealift Command
MSFMCA	Magnuson-Stevens Fishery Management Conservation Act
NAS	Naval Air Station
NMFS	National Marine Fisheries Service
NOD	Notice of Determination
NOP	Notice of Preparation
PM	particulate matter
PSB	Port Security Barrier

RWQCB	Regional Water Quality Control Board
Safety Plan	Site Worker Health and Safety Plan
Safety Program	Site-Specific Community Health and Safety Program
SAP	Sampling and Analysis Plan
SB	Senate Bill
SDIA	San Diego International Airport
Sediment Characterization Report	Marine Sediment Contamination Characterization Report
SLC	State Lands Commission
SOPs	standard operating procedures
SWDS	Storm Water Diversion System
Testing and Profiling Plan	Soil and Groundwater Testing and Profiling Plan
TUOP	Tidelands Use and Occupancy Permit
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
VAP	Voluntary Assistance Program

1.1 Project Overview

BAE Systems San Diego Ship Repair Inc. (BAE Systems) is proposing a maintenance, repair, and replacement project for waterfront infrastructure associated with mooring and operational facilities at its San Diego Ship Repair Yard (project site). BAE Systems currently leases 9.8 acres of land and 16.6 acres of water from the San Diego Unified Port District (District). This lease is scheduled to expire in 2034. In addition, BAE Systems currently occupies a parcel pursuant to a now-expired 5-year Tidelands Use and Occupancy Permit (TUOP) from the District for an additional 2.0 acres of land and 4.0 acres of water.¹ As a result, BAE Systems leases approximately 11.8 acres of land area and approximately 20.6 acres of water area from the District. In addition to these leased and permitted areas, BAE Systems leases 3.5 acres of submerged land from the District. These submerged lands were originally leased from the California State Lands Commission (SLC). However, effective January 1, 2020, this area was transferred to the District's jurisdiction per Senate Bill (SB) 507, which granted and conveyed in trust to the District all right, title, and interest in certain tidelands and submerged lands, as enumerated in SB 507. BAE Systems' lease with the SLC was transferred to the District. The total acreage occupied by BAE (including the TUOP parcel) pursuant to agreements with the District makes up the project site.

The project site consists of three working piers, five wet berths, and two floating drydocks, all of which are used to modernize, repair, and overhaul marine vessels. The smaller of the two drydocks, the Pride of San Diego, has been on the site since 1984. In 2017, the larger drydock, Pride of California, was commissioned to meet the growing needs of BAE Systems' customers.

BAE Systems, as the project proponent, is proposing a maintenance, repair, and replacement project for waterfront infrastructure associated with mooring and operational facilities at its San Diego Ship Repair Yard. The BAE Systems Waterfront Improvement Project (project or proposed project) includes 15 distinct project elements that are designed to improve efficiency and functionality of the existing BAE Systems facility by replacing aging structures, improving existing infrastructure, increasing space utilization, and increasing efficiency of operations.

- 1. Pride of San Diego Drydock Dredging² and Moorage
- 2. Pride of San Diego Drydock Wharf Replacement and Realignment
- 3. Fender System Repair and Replacement

¹ The TUOP between the District and BAE Systems expired October 31, 2019. BAE Systems is currently on a limited holdover tenancy pursuant to that expired TUOP. However, it is anticipated that the TUOP will be renewed. TUOP renewal would not authorize any new improvements or activities that could physically impact the environment. It would reaffirm BAE Systems' existing occupancy right and continue existing operations. Therefore, any TUOP renewal is considered a separate action previously analyzed under a separate California Environmental Quality Act document for the Pier 1 North Drydock, Associated Real Estate Agreements and Removal of Cooling Tunnels project, SCH #2014041071, and is not part of the proposed project.

² Dredging is defined as the removal of sediments and debris from the bottom of lakes, rivers, harbors, and other water bodies.

- 4. Pier 3 South Nearshore Dredging
- 5. Pier 3 Mooring Dolphin
- 6. Pier 3 North Lunchroom Wharf Replacement and Realignment
- 7. Quay Wall Modifications
- 8. Port Security Barrier Replacement
- 9. Small Boat Mooring Float Replacement
- 10. Central Tool Room Demolition and Reconstruction
- 11. New Production Building
- 12. Administrative Office Building
- 13. Pier 1 Restroom Renovation and/or Demolition
- 14. Main Electrical Utility Service Update
- 15. Sanitary Sewer and Potable Water Utility Services

The majority of the proposed work would take place within the District's jurisdiction (i.e., Project Elements 2, 3, 4, 6, 7, and 9–15). Project Elements 1, 5, and 8 are within the District's leasing jurisdiction and the California Coastal Commission's (CCC) permitting jurisdiction, per SB 507 and the California Coastal Act. BAE Systems will apply directly to the CCC for authorization and entitlements for Project Elements 1, 5, and 8.

1.2 Certification of the Final Environmental Impact Report

The District is the Lead Agency, as defined in California Environmental Quality Act (CEQA) Guidelines Section 15367, because it has principal responsibility for approving the proposed project. As Lead Agency, the District also has primary responsibility for complying with CEQA. Therefore, the Board of Port Commissioners (Board), as the decision-making body of the District, is required to consider the information contained in the Final Environmental Impact Report (EIR) prior to approving the proposed project. Specifically, the Board must certify that:

- The Final EIR has been completed in compliance with CEQA;
- The Final EIR was presented to the decision-making body of the Lead Agency, and the decisionmaking body reviewed and considered the information contained in the Final EIR prior to approving the project; and
- The Final EIR reflects the Lead Agency's independent judgment and analysis.

Other agencies may use the information contained in this Final EIR when considering issuance or authorization of any other approvals for the project. The Final EIR, in compliance with Section 15132 of the State CEQA guidelines, includes the chapters and attachments listed under Section 1.3 below.

1.3 Contents and Organization of the Final EIR

The content and format of this Final EIR is designed to meet the requirements of CEQA; the State CEQA Guidelines, Article 9, specifically State CEQA Guidelines Section 15132; and the District's Guidelines for Compliance with CEQA (Resolution 97-191). Table 1-1 summarizes the organization and content of the Final EIR.

The Draft EIR that was previously circulated for public review is an integral part of the Final EIR; both documents are intended to be used together. The Final EIR (including the Draft EIR and its appendices) may be viewed on the District's website. A paper copy of the Final EIR (including the Draft EIR and its appendices), will be available at the District Clerk office at 3165 Pacific Highway, San Diego, CA 92101, once regular business hours resume, which are Monday through (every other) Friday, 8 a.m. to 5 p.m.

Location	Contents		
VOLUME 1			
Chapter 1 Introduction	Provides background on the proposed project, the requirements for a Final EIR and other related documents, and the organization of the Final EIR.		
Chapter 2 <i>Executive Summary</i>	Briefly summarizes the proposed project; identifies each significant effect, with proposed mitigation measures and alternatives that would reduce or avoid that effect; identifies the areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and summarizes the issues to be resolved, including the choice among alternatives and how to mitigate the significant effects (State CEQA Guidelines Section 15123).		
Chapter 3 Project Description	Contains both a map of the precise location and boundaries of the proposed project and its location relative to the region; lists the proposed project's central objectives, underlying purpose, and benefits; and provides a detailed description of the proposed project's technical, economic, and environmental characteristics (State CEQA Guidelines Section 15124(a), (b), and (c)).		
Chapter 4 Errata and Revisions	Includes the revisions to the Draft EIR and its technical appendices (where appropriate), which were prepared in response to comments received during the public review period for the Draft EIR (State CEQA Guidelines Section 15132).		
Chapter 5 <i>Comments Received and</i> <i>District Responses</i>	Includes a list of agencies, organizations, and individuals that provided comments on the Draft EIR during the public review period. Each comment is assigned a comment number, which corresponds to a response (State CEQA Guidelines Section 15132).		
Attachment 1 Mitigation Monitoring and Reporting Program	The Mitigation Monitoring and Reporting Program (MMRP) for the project is included as a chapter of the Final EIR. The MMRP is presented in table format and identifies mitigation measures for the proposed project, the party responsible for implementing the mitigation measures, the timing of implementing the mitigation measures, and the monitoring and reporting procedures for each mitigation measure (State CEQA Guidelines Section 15097).		

Table 1-1. Document Organization and CEQA Requirements

Location	Contents			
VOLUME 2				
Draft EIR	Volume 2 of the Final EIR contains the Draft EIR (Volume I of II of the Draft EIR) that was previously circulated for public review. The Draft EIR contains all the contents described within CEQA, the State CEQA Guidelines, Article 9, and the District's CEQA Guidelines. The Draft EIR is included as Volume 2 of the Final EIR. A hard copy will be available at the District Clerk's office once regular business hours resume.			
VOLUME 3				
Draft EIR Technical Appendices	Volume 3 of the Final EIR consists of Appendices A through G of the Draft EIR (Volume II of II of the Draft EIR). The appendices include additional background information and technical detail for several of the resource areas, as well as the Initial Study/Notice of Preparation and any comments received during the scoping process. A hard copy will be available at the District Clerk's office once regular business hours resume.			
Under Separate Cover				
Findings of Fact and Statement of Overriding Considerations	Provides findings on each significant impact and alternative, accompanied by a brief explanation of the rationale for each finding. The findings are supported by substantial evidence in the record (State CEQA Guidelines Section 15091). The statement of overriding considerations provides a written statement related to balancing, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project (State CEQA Guidelines Section 15093).			

2.1 **Project Overview**

BAE Systems San Diego Ship Repair Inc. (BAE Systems), as the project proponent, is proposing a maintenance, repair, and replacement project for waterfront infrastructure associated with mooring and operational facilities at its San Diego Ship Repair Yard (project site). The BAE Systems Waterfront Improvement Project (project or proposed project) includes 15 distinct project elements that are designed to improve efficiency and functionality of the existing BAE Systems facility by replacing aging structures, improving existing infrastructure, increasing space utilization, and increasing efficiency of operations. The proposed project includes the following.

- 1. Pride of San Diego Drydock Dredging¹ and Moorage
- 2. Pride of San Diego Drydock Wharf Replacement and Realignment
- 3. Fender System Repair and Replacement
- 4. Pier 3 South Nearshore Dredging
- 5. Pier 3 Mooring Dolphin
- 6. Pier 3 North Lunchroom Wharf Replacement and Realignment
- 7. Quay Wall Modifications
- 8. Port Security Barrier Replacement
- 9. Small Boat Mooring Float Replacement
- 10. Central Tool Room Demolition and Reconstruction
- 11. New Production Building
- 12. Administrative Office Building
- 13. Pier 1 Restroom Renovation and/or Demolition
- 14. Main Electrical Utility Service Update
- 15. Sanitary Sewer and Potable Water Utility Services

2.2 Project Location

The project site, BAE Systems San Diego Ship Repair Yard, is located along the San Diego Bay, south of downtown San Diego, within the District's jurisdiction. BAE Systems currently leases 9.8 acres of land and 16.6 acres of water from the District. This lease is scheduled to expire in 2034. In addition, BAE Systems currently occupies a parcel pursuant to a now-expired 5-year Tidelands Use and Occupancy Permit (TUOP) from the District for an additional 2.0 acres of land and 4.0 acres of

¹ Dredging is defined as the removal of sediments and debris from the bottom of lakes, rivers, harbors, and other water bodies.

water.² As a result, BAE Systems leases approximately 11.8 acres of land area and approximately 20.6 acres of water area from the District. In addition to these leased and permitted areas, BAE Systems leases 3.5 acres of submerged land from the District. These submerged lands were originally leased from the California State Lands Commission (SLC). However, effective January 1, 2020, this area was transferred to the District's jurisdiction per SB 507, which granted and conveyed in trust to the District all right title, and interest in certain tidelands and submerged lands, as enumerated in SB 507. BAE Systems' lease with the SLC was transferred to the District. The total acreage occupied by BAE Systems (including the TUOP parcel) pursuant to agreements with the District is 35.9 acres and makes up the project site. The waterside facilities at the project site currently contain three working piers, five wet berths, and two floating drydocks. The landside facilities include administration offices, production shops, training areas, and related utilities and infrastructure.

The project site is situated adjacently southeast of the Tenth Avenue Marine Terminal, an omniterminal that handles refrigerated containers, dry bulk, liquid bulk, and general cargo. Its northeasterly boundary is generally bordered by East Belt Street; its southeasterly boundary borders the General Dynamics National Steel and Shipbuilding Company (NASSCO) facility; and its southwesterly boundary is in the San Diego Bay, parallel to the shore.

Central downtown San Diego is approximately 1.7 miles northwest, and the San Diego neighborhood of Barrio Logan is approximately 1,000 feet northeast of the project site. San Diego International Airport is approximately 3 miles to the northwest of the project site. Regional vehicle access to the project site is provided by Interstate (I)-5 to the northeast and I-15 to the east. Several freeway ramps are within 1 mile of the project site. The site is also within proximity of light-rail, with the closest trolley stop, Barrio Logan Station, approximately 1,500 feet to the north across East Harbor Drive, and Harborside Station approximately 0.5 mile to the southeast. Figure 2-1 shows the regional location and access to the project site, while Figure 2-2 provides the precise location and boundaries of the project site.

² The TUOP between the District and BAE Systems expired October 31, 2019. BAE is currently on a limited holdover tenancy pursuant to that expired TUOP. However, it is anticipated that the TUOP will be renewed. TUOP renewal would not authorize any new improvements or activities that could physically impact the environment. It would reaffirm BAE Systems' existing occupancy right and continue existing operations. Therefore, any TUOP renewal is considered a separate action previously analyzed under a separate CEQA document for the Pier 1 North Drydock, Associated Real Estate Agreements and Removal of Cooling Tunnels project, SCH #2014041071, and is not part of the proposed project.





Figure 2-1 Regional Location BAE Systems Waterfront Improvement Project





Figure 2-2 Project Location Map BAE Systems Waterfront Improvement Project

2.3 Project Objectives

To achieve the need and purpose of the proposed project, the following project objectives have been identified.

- 1. Construct and operate shipyard repair facilities that maximize the use of existing waterways, available shoreline, and existing land.
- 2. Modernize the BAE Systems San Diego Ship Repair Yard by providing improved facilities that meet the needs of the current and anticipated fleets of the military and commercial customers.
- 3. Enhance worker safety, customer security, and environmental protection programs through the integration of relevant project elements.
- 4. Invest in new shipyard infrastructure that will enhance the short- and long-term attractiveness and viability of San Diego Bay and the region to military and commercial ship operators for construction and repair, consistent with the Port Master Plan.³
- 5. Preserve jobs by maintaining the physical capacity and technical capability to support the Navy's presence as well as commercial maritime needs in San Diego.

2.4 Project Components

The proposed project consists of 15 distinct project elements that are designed to improve the efficiency and functionality of the existing BAE Systems San Diego Ship Repair Yard. Figure 2-3 provides an overall site plan for identifying the location of each project element by number. A detailed discussion of the proposed activities under each project element is provided below.

2.4.1 Pride of San Diego Drydock Dredging and Moorage Replacement (Project Element 1)

Project Element 1 includes dredging and associated replacement of mooring dolphins⁴ to hold the Pride of San Diego drydock in place. Figure 2-4 depicts its conceptual dredge design. Most of Project Element 1 is within the District's jurisdiction; however, the westernmost mooring dolphin and a portion of the required dredging area would be within both District jurisdiction (leasing) and California Coastal Commission (CCC) jurisdiction (permitting).

Because of conflicts with the original 1983 dredge sump⁵ design, the current configuration requires the drydock to be moved⁶ from its mooring to the west and south in order to submerge and dock or undock a vessel each time a vessel comes in for drydock servicing. When a wide-bodied vessel is positioned adjacent to Pier 3 North, the size of the vessel prevents the drydock from being moved into its submergence location. Dredging and relocation of the mooring dolphins would allow the

³ "Renovation and redevelopment of existing facilities will continue as industries respond to market demands and changes in the maritime industrial climate." San Diego Unified Port District, Port Master Plan (August 2017), page 79.

⁴ A *mooring dolphin* is defined as an in-water structure, typically made up of a cluster of piles that extends above the water surface to provide mooring points for vessels.

⁵ A *sump* is defined as a pit or other type of hollow area that collects liquids.

⁶ Referred to as *translated*. *Translation* means to move the dock in a specific direction—north, south, east, or west.

drydock to submerge and lift vessels in place without the need for the drydock to be moved. This would improve operational efficiencies because wide-bodied vessels could be moored at Pier 3 North concurrently with drydocked vessels while under repair at the Pride of San Diego drydock. Accordingly, this would eliminate the need to run the diesel engines of two separate vessels concurrently during docking and undocking activities as well as the need for tugboats to move the drydock. In addition, Project Element 1 proposes to dredge sediment around the Pride of San Diego ramp wharf and eastern mooring dolphin. This would remove potentially contaminated sediment that was not accessible during the remedial dredging that occurred in 2015 under Regional Water Quality Control Board (RWQCB) mandated Cleanup and Abatement Order (CAO) No. R9-2012-0024. During remedial activities, sand, including gravelly sand, was placed in areas that were not accessible. Proposed replacement of the mooring dolphins may allow access to these areas; therefore, potentially contaminated gravelly sand, sand, and sediment may be removed during dredging.

In total, Project Element 1 proposes to dredge approximately 98,800 cubic yards (cy) of material. Figure 2-5 depicts the proposed conceptual dredge design to achieve compliance with the CAO, which includes both Project Elements 1 and 6. (Figure 2-6 depicts the conceptual dredge design for Project Element 6 only.) Based on preliminary assessments conducted by the project proponent, it was conservatively estimated that 20 percent of the dredge material for Project Element 1 would contain contaminated sediment, although additional analysis indicates the estimate may be closer to 11 percent.⁷ Therefore, the analysis contained within this EIR assumes approximately 80 to 89 percent of all dredged materials for Project Element 1 would be disposed of at an approved Ocean Dredge Material Disposal Site (i.e., U.S. Environmental Protection Agency [EPA] disposal site LA-5); the remaining 11 to 20 percent would be unsuitable for unconfined aquatic disposal, per U.S. Army Corps of Engineers (USACE) and EPA disposal criteria, and would be transported to an approved disposal facility capable of accepting contaminated sediments. It should be noted that, in the event that unconfined aquatic disposal is not suitable, only approximately 15,280 cy of the proposed 98,800 total cy of sediment would be dredged to comply with CAO No. R9-2012-0024.

⁷ Where applicable throughout this EIR, the more conservative estimate is used for CEQA analysis purposes. For example, Sections 4.1, *Air Quality and Health Risk*, and 4.3, *Greenhouse Gas Emissions and Energy*, of the Draft EIR conservatively analyzed both the high end of trucks (i.e., 20 percent upland disposal) and the high end of tug and scow trips (i.e., 89 percent ocean disposal) to quantify project emissions.



LOR	#	PROJECT DESCRIPTION
	1	PRIDE OF SAN DIEGO DRYDOCK DREDGING / MOORING
	2	PRIDE OF SAN DIEGO WHARF REPLACEMENT / REALIGNMENT
	3	FENDER SYSTEM REPAIR AND REPLACEMENT
\mathbb{N}	4	PIER 3 SOUTH NEARSHORE DREDGING
	5	PIER 3 MOORING DOLPHIN
	6	PIER 3 LUNCHROOM WHARF REPLACEMENT / REALIGNMENT
	7	QUAYWALL MODIFICATIONS AT SOUTH END OF PROPERTY
	8	PORT SECURITY BARRIER (PSB) REPLACEMENT (NAVY SECURITY REQ.)
	9	SMALL BOAT MOORING FLOAT REPLACEMENT
	10	CENTRAL TOOL ROOM REPLACEMENT / RELOCATION
	11	NEW PRODUCTION BUILDING
\mathbb{N}	12	ADMINISTRATIVE OFFICE COMPLEX
\mathbb{Z}	13	PIER 1 RESTROOM (EXISTING) DEMOLITION
	14	MAIN ELECTRICAL UTILITY SERVICE
	15	SANITARY AND POTABLE WATER CAPACITY INCREASE



w/Figures/Doc/EIR/F	final design process.			-70 65		
npro		/		Landward of US Pier Head Line	Waterward of US Pier Head Line	TOTAL
s.				Cubic Yards	Cubic Yards	Cubic Yards
tem		Design Volume (w/ 2' allow	able overdepth)	81,400	17,400	98,800
Sys		Estimated Ocean Disposal		70,900	17,400	88,300
Щ	Scale in Feet	Estimated Upland Disposal		10,500	0	10,500
o/B/		TOTAL DREDGE VOLUME				98,800
\\PDCCITRDSGIS2\Projects 4\Port of San Die	SOURCE: Upland topography from Digital Mapping Inc., dated September 2009, and supplemented by Environmental Data Solutions survey dated April 13, 2013. Pre-dredge bathymetric data is from CLE Engineering survey dated February 12, 2017 supplemented with post-sand cover survey from San Diego Shipyards North project, completed January 2016. HORIZONTAL DATUM: California State Plane, Zone 6, NAD83, U.S. Feet. VERTICAL DATUM: Mean Lower Low Water (MLLW).	LEGEND: 	Existing C Proposed	ontour Dredge Contour		Proposed Site Improvements Ramp Wharf Dredge Limits POSD Dry Dock Dredge Limits



Figure 2-4 Project Element 1 Conceptual Dredge Design BAE Systems Waterfront Improvement Project





	performed by eTri fromOoctober 20 2016. HORIZONTAL D Plane, Zone 6, No 1983 (NAD83), U VERTICAL DATU Water (MLLW) LEGEND: 	rac, Inc., on various dates 15 through February 25, ATUM: California State both American Datum of .S. Survey Feet JM: Mean Lower Low SMU Boundary Existing Major Contour (5' Interval) Existing Minor Contour (1' Interval) Dredge Footprint (Floor) Dredge Footprint (Side Slope)
	1	Volume (CV)
		Volume (CY)
	n Area'	10,500
nd Mooring Dolphi	174 CU	2 000

Figure 2-5 Project Element 1 and Project Element 6 Conceptual CAO Dredge Areas **BAE Systems Waterfront Improvement Project**



13 4 Pier3 BreakArea.mxd Date: 12/18/2019

Control of the second

Figure 2-6 Project Element 6 Pier 3 Break Area Conceptual Dredge Design BAE Systems Waterfront Improvement Project The following actions are proposed as part of Project Element 1:

- Shifting the Pride of San Diego drydock west by approximately 100 feet.
- Replacing two existing 17.5- by 21-foot mooring dolphins (368 square feet for each dolphin), including removing twenty-six 18-inch-square concrete piles and 85 cy of concrete caps and installing thirty-eight 24-inch octagonal precast concrete piles with 900 total square feet of surface area.
 - Demolition of the existing mooring dolphins, concrete piles, and concrete caps would generate approximately 1,005 cy of debris.
- Relocating the drydock sump, which would require dredging to -70 feet mean lower low water (MLLW). The following dredging specifics are proposed:
 - Dredging approximately 98,800 cy⁸ of material, including 2 feet of overdepth, consisting of:
 - 81,400 cy within District (leasing) jurisdiction.
 - 17,400 cy within CCC (permitting) jurisdiction.
 - Disposing of up to approximately 19,800 cy of dredged material (i.e., up to 20 percent of the total dredged material) at an approved upland disposal site, such as the Otay Landfill.
 - Disposing of up to approximately 87,900 cy of dredged material (i.e., up to 89 percent of the total dredged material) at the Ocean Dredge Material Disposal Site (i.e., EPA's San Diego disposal site LA-5).
 - Transporting up to 36 scows⁹ (2,500 cy capacity each) to the LA-5 disposal site.

Dredging operations, including equipment maintenance activities, shift changes, barge changes, and movement about the site would be conducted 24 hours per day, 7 days a week, for 100 days.

2.4.2 Pride of San Diego Drydock Wharf Replacement and Realignment (Project Element 2)

Once drydock dredging and moorage replacement have been completed (i.e., Project Element 1), wharf and ramp modifications would be needed. Specifically, Project Element 2 would extend the existing Pride of San Diego wharf to provide a material handling area adjacent to the northeastern portion of the drydock and encompass the eastern gripper¹⁰ mooring dolphin. An apron would be installed at the end of the drydock, while a new pedestrian access ramp and support platform would be installed on the south side of the drydock to minimize the number of in-water structures required to access and support the drydock at its proposed new location. The new replacement structure would be incorporated into the existing Pride of San Diego wharf ramp.

For the purposes of this analysis, complete demolition and construction activities are assumed, which would be the reasonably foreseeable worst-case scenario. The following actions are proposed as part of Project Element 2.

⁸ Volume based on pre-dredge bathymetric survey data from CLE Engineering, composite surveys dated February 2017 and January 2016, and conceptual dredging volumes provided by Anchor QEA, dated July 2019.

⁹ A *scow* is a low, flat barge-like vessel used to carry material.

¹⁰ A *gripper* is a mechanical feature of a mooring system, used for securing floating drydocks to a mooring dolphin.

- Demolishing 5,540 square feet of existing wharf and twenty 18-inch piles, which would generate approximately 408 cy of debris.
- Installing 12,500 square feet of cast-in-place decking on 73 octagonal piles¹¹ and six concrete precast piles,¹² extending from the existing wharf structure to the northeastern portion of the Pride of San Diego drydock. New in-water structures (fixed) associated with the new wharf would be built to an increased elevation of +12 feet MLLW.
- Installing an apron¹³ at the end of the drydock and a new pedestrian access ramp and support platform on the south side for material handling adjacent to the drydock.

2.4.3 Fender System Repair and Replacement (Project Element 3)

The existing fender¹⁴ systems are experiencing natural deterioration due to age and routine damage from decades of use. New fenders are required where shoreline features have been reconstructed.

The following actions are proposed as part of Project Element 3.

- Removing and replacing in place the 503 existing 14-inch by 89-foot steel H-pile¹⁵ fenders. Removal of the existing fenders would generate approximately 269 cy of debris.
- Installing 122 new steel H-pile fenders, for a total of 625 fenders. The new fender locations are as follows:
 - Bulkhead installation at the south side of Pier 1, resulting from remediation and fill of the former marine railways in 2004.
 - Bulkhead replacement along the shoreline south of Pier 3 to the southern property line.
 - The west-facing perimeter of the proposed new marginal wharf area associated with Pier 3 North Lunchroom Wharf Replacement and Realignment (Project Element 6).

In addition, fenders are occasionally damaged when struck by vessels, in which case they need to be replaced quickly in order to provide safe moorage for vessels. Therefore, for analysis purposes, it is assumed that up to 39 steel H-pile fenders per year would be replaced over the life of the existing lease (until 2034).

2.4.4 Pier 3 South Nearshore Dredging (Project Element 4)

Dredged material has entered the Pier 3 berth sump; therefore, this project element proposes to dredge approximately 15,000 cy of material. Figures 2-7a through 2-7c depict the conceptual dredge plan for Project Element 4. In addition, the Pier 3 sump requires modification for safe passage of tugboats while maneuvering large ships.

¹¹ Octagonal piles are eight-sided concrete support structures.

¹² *Precast piles* are concrete piles that are formed in circular, square, rectangular, or octagonal shapes. Precast piles are manufactured in a casting yard before transport to the project site.

¹³ An *apron* is the space allotted for maneuvering a vehicle into alignment with the dock.

¹⁴ A *fender* is a piece of equipment that protects a pier, berth, jetty, or other vessel from a berthing vessel. Fenders are typically made of rubber, foam, or plastic in order to absorb energy from the berthing vessel.

¹⁵ A *steel H-pile* is an in-water support structure with a cross beam that forms an H-like shape.





Figure 2-7a Conceptual Dredge Design - Project Element 4 Dredging BAE Systems Waterfront Improvement Project





NOTE: Drydock location and dimensions are based on file received from BAE Systems and Triton Engineers on October 21, 2016.

Figure 2-7b Cross-sections A-A' and B-B' - Project Element 4 Dredging BAE Systems Waterfront Improvement Project



approximate, and are based on 'Bataan_LHD5_SRD_Docking_Plan_ 6859465_RevC_Multiple_Sheets.pdf



Figure 2-7c Operational Conditions Cross-section C-C' - Project Element 4 Dredging BAE Systems Waterfront Improvement Project

San Diego Unified Port District

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The following actions are proposed as part of Project Element 4.

- Dredging approximately 15,000 cy from the toes of the dredge sump to the limit line elevation of the new bulkhead (-17 feet MLLW). Dredging would extend to an operational depth of -35 feet MLLW plus 2 feet of overdepth dredging.
- Placing dredged material directly onto dredge scows, with no stockpiling of materials on the site; loading directly onto trucks from the scows; and disposing of materials. Dredged material is dewatered, treated, and disposed of in accordance with existing permit and landfill requirements.

Dredging operations, including equipment maintenance activities, shift changes, barge changes, and movement about the site would occur 24 hours per day, 7 days per week, for 69 days.

For Project Element 4, the extent of contamination within the sediment in this area is currently unknown. Therefore, there are two scenarios under consideration for disposal of dredged materials.

- The **50/50 Scenario** assumes that half of the total dredged material (7,500 cy) generated during Project Element 4 would be suitable for ocean disposal and half (7,500 cy) would require upland disposal. This scenario would result in approximately three scows to dispose of the material at the ocean disposal site, with each scow trip conveying 2,500 cy. The remaining half of the dredged material would be taken to upland locations using haul trucks with an estimated 15 cy capacity per truck.
- The **All-Truck Scenario** assumes that all dredged material (15,000 cy) would be disposed of at an upland location using haul trucks with an estimated 15 cy capacity per truck.

2.4.5 Pier 3 Mooring Dolphin (Project Element 5)

Installation of an additional mooring dolphin would be necessary to ensure safe vessel moorage, especially during extreme storm surge or other climatic conditions (e.g., wind and tide). The mooring dolphin would provide a fixed structure for securing the bow of large vessels and be designed consistent with existing mooring dolphins at the BAE Systems facility. The proposed new mooring dolphin would be entirely within CCC's jurisdiction.

The following actions are proposed as part of Project Element 5.

- Installing one 16- by 20-foot, 3-foot-thick mooring dolphin 970 feet offshore (i.e., 270 feet west of the U.S. Pierhead Line). The height of the new mooring dolphin would extend to +13 feet MLLW. The following components are proposed for the new mooring dolphin:
 - Eight 24-inch concrete octagonal piles.
 - $\circ \quad \mbox{Two 150-ton double bitts.}^{16}$
- Installing 16 steel H-pile fenders, 12 cylindrical fenders, whalers,¹⁷ and chocks¹⁸ around the perimeter of the proposed mooring dolphin.

¹⁶ A *double bitt* is a type of bollard with two metal protrusions, which are used to secure lines from vessels to a dock. (A *bollard* is a short, thick post on the deck of a ship, or a wharf, for securing lines from a ship.)

¹⁷ *Whalers* are the large wooden crossbars that support the bulkhead, which is part of the pier. (The *bulkhead*, as defined here, refers to a retaining wall along the waterfront.)

¹⁸ Chocks are metal fixtures that hold lines in position so that vessels can tie up to a bollard, bitt, etc.

2.4.6 Pier 3 North Lunchroom Wharf Replacement and Realignment (Project Element 6)

The Pier 3 wharf is a timber structure at the northern foot of Pier 3 that is aging and in need of replacement. The timber deck, which is supported by twenty-seven 12-inch-square precast concrete piles, was originally installed in the 1950s or 1960s but underwent significant modifications in 1985. The structure is currently used by employees during lunch breaks. In addition, an open area, which is currently surrounded by structures, would be covered. As part of the replacement, dredging may remove potentially contaminated sediment that was not accessible during the remedial dredging associated with CAO No. R9-2012-0024. An estimated 2,000 cy of potentially contaminated sediment this area. Figure 2-5 depicts the conceptual dredge design to achieve compliance with CAO No. R9-2012-0024, and Figure 2-6 depicts the conceptual dredge design for Project Element 6.

The following actions are proposed as part of Project Element 6.

- Demolishing the existing overwater, 1,150-square-foot restroom structure; removing 2,915 square feet of wood decking; and removing 595 square feet of metal. Removal of these existing materials would generate approximately 77 cy of debris.
- Removing twenty-seven 12-inch concrete pilings and one H-pile.
- Installing forty-eight 24-inch octagonal pre-cast concrete pilings.
- Constructing a new overwater structure consisting of 8,800 square feet of cast-in-place decking (including a berm edge and stormwater collection system) to replace the existing overwater structure that would be demolished. The height of the new decking would extend to +13 feet MLLW.
- Dredging approximately 2,000 cy of material from beneath the Pier 3 break area and disposing of it at an approved upland disposal site, such as the Otay Landfill.

2.4.7 Quay Wall Modifications (Project Element 7)

A rock revetment slope is affecting vessel mooring and requires reinstallation. The following actions are proposed as part of Project Element 7.

- Dredging 300 cy of rock, which would be disposed of at a local recycling facility.
- Dredging 500 cy of sediment in the immediate vicinity of the submerged sheet pile structure, which would be disposed of at an approved upland disposal site, such as the Otay Landfill.
- Installing up to 50 linear feet of a submerged sheet pile structure.

2.4.8 Port Security Barrier Replacement (Project Element 8)

A Port Security Barrier (PSB) is maintained around the facility, as required by the U.S. Navy, for vessels within the BAE Systems facility. The PSB deters small craft from approaching Navy vessels while they are undergoing repair. The U.S. Navy has instituted newer, stricter requirements for the PSB system, resulting in the need to replace the existing PSB with a new design. The proposed new PSB would be partially within CCC jurisdiction.

The following actions are proposed as part of Project Element 8.

- Removing the existing 3,500-linear-foot floating boom and replacing it with a new 3,500-foot hard barrier. The new PSB includes the following components:
 - \circ $\,$ Ten 8- by 7.55-foot buoys secured by three anchors per buoy location.
 - o 3,500 linear feet of hard barrier (PSB-T or PSB-V type) with navigational aid lights.
- Removing and disposing of the existing barrier, buoys, and anchors; disposing of 3,500 linear feet, or approximately 120 cy, of debris; and recycling 13 tons of scrap steel and 19 cy of concrete.

2.4.9 Small Boat Mooring Float Replacement (Project Element 9)

The small-boat mooring float allows personnel and materials to be deployed for waterfront facility maintenance and inspection as well as other surveillance activities, including drills and exercises, conducted on site. In addition, as part of the enhanced site security requirements instituted by the U.S. Navy, BAE Systems is required to maintain on-water security, including security patrol vessels. The following actions are proposed as part of Project Element 9.

- Removing and replacing four piles that support the float.
- Replacing the existing 320-square-foot aged timber moorage float system (160 square feet for each float) with two 200-square-foot concrete floats. The new floats would include one 45-foot-long aluminum gangway, low-voltage electrical service, and potable water.
- Installing four 18-inch-round precast concrete piles.

2.4.10 Central Tool Room Demolition and Reconstruction (Project Element 10)

The existing central tool room is an aging structure at the foot of Pier 3, on the south side of the project site. The structure would be demolished, and a new tool room would be constructed on the proposed new wharf structure (as proposed as part of the Pier 3 North Lunchroom Wharf Replacement and Realignment [Project Element 6]).

The following actions are proposed as part of Project Element 10.

- Demolishing the existing 2,000-square-foot central tool room structure, which would generate approximately 16 cy of debris.
- Excavating approximately 150 cy of soil to a maximum depth of 2 feet for the new building foundation. The majority of the excavated soil material would be recompacted and used as the base for new asphalt.
- Constructing a three-story replacement structure that would provide an approximately 21,900square-foot work space and a 7,300-square-foot building footprint. The height of the proposed new building would extend to +50 feet MLLW.
- Replacing the existing Pier 3 restroom facilities within the new central tool room or incorporating the existing Pier 3 restrooms into the new structure.

• Providing utilities and related infrastructure (e.g., potable water, sanitary sewer service, compressed air, natural gas, electrical, computer, communications) within the new tool room.

2.4.11 New Production Building (Project Element 11)

Project Element 11 would involve demolishing the existing production building and constructing a new production building near the existing Building 6/7 (see Figure 2-3). This proposed building would increase the efficiency of material assembly. The first floor of the new structure would be used for production and would be equipped with an overhead bridge crane. The second and third floors would contain engineering, production support, and administration functions.

The following actions are proposed as part of Project Element 11.

- Demolishing the existing 17,675-square-foot production building, which would generate approximately 698 cy of debris.
- Excavating approximately 2,600 cy of soil to a maximum depth of 4 feet for the new building foundation. The majority of the excavated material would be reused as backfill around foundations or for the concrete slab under the new production building. However, it is anticipated that approximately 400 cy of excavated soil material would not be suitable for reuse and therefore would be disposed of at an approved upland disposal site.
- Constructing a new three-story production building with a 48,379-square-foot work space and a 16,475-square-foot footprint, with a height of up to 50 feet.
- Installing an overhead bridge crane within the first floor of the new production building.

2.4.12 Administrative Office Building (Project Element 12)

The existing offices are trailers that BAE Systems rents/leases for customer use in support of ship repair contracts performed on the site. These facilities provide space for the government contracts, quality assurance, and program management personnel who have been assigned to these contracts. This project element includes construction of permanent administrative office spaces. The first floor would contain production spaces, a tool room, and a restroom. The second and third floors would contain office space and a break room. The new administrative office building would accommodate existing personnel, with the intention of reducing/eliminating the need for double and triple occupancies, which currently occur at several work stations in the production spaces throughout the project site.

The following actions are proposed as part of Project Element 12.

- Disassembling and removing four trailers, totaling approximately 8,016 square feet, which would generate approximately 150 cy of debris.
- Demolishing approximately 8,600 square feet of asphalt pavement and excavating for water and sewer service piping, footings/foundations, and general recompaction activities. It is anticipated that approximately 650 cy of soil material would be excavated to a maximum depth of 5 feet, and a maximum of 200 cy of material would be disposed of at an approved upland disposal site.
- Constructing a new three-story administrative office building with approximately 46,000 square feet of work space, a building footprint of 16,000 square feet, and a height of up to 55 feet.
2.4.13 Pier 1 Restroom Renovation and/or Demolition (Project Element 13)

The existing 506-square-foot restroom facility requires reconfiguration to increase capacity and improve functionality for employees, customers, and contractors. The restrooms would be retrofitted with more water efficient fixtures, LED lighting, and other features to increase utility and efficiency.

As an alternative, upon completion of Project Element 12 (Administrative Office Building), which includes a restroom facility, the Pier 1 restroom may be demolished if it is determined that it is no longer needed. The demolition would generate approximately 51 cy of debris, and excavation would be limited to removal of the buried piping to the Pier 1 lift station. It is anticipated that approximately 40 cy of soil material would be excavated to a maximum depth of 5 feet, and 10 cy of material would be disposed of at an approved upland disposal site.

2.4.14 Main Electric Utility Service Update (Project Element 14)

Project Element 14 would reconfigure the electrical utility distribution system in Building 13. This would involve relocation of the San Diego Gas & Electric main in Building 13 to Building 65, alongside East Belt Street, adjacent to the shipyard's existing four-way switch. Relocation of this electrical main would increase overall site safety by allowing San Diego Gas & Electric technicians access to critical electrical components outside the secure property perimeter. In addition, this project element would also provide additional space in the Building 13 electrical room, allowing BAE Systems to reconfigure and/or modernize the electrical equipment as needed.

The following actions are proposed as part of Project Element 14.

- Replacing and upgrading electrical distribution equipment to ensure reliability and protect site infrastructure.
- Relocating the existing San Diego Gas & Electric main (i.e., meter) from Building 13 to Building 65. Existing electrical conduits within the project site would be reused to pull electrical cables to the relocated main in Building 65.

2.4.15 Sanitary Sewer and Potable Water Utility Services (Project Element 15)

The existing sanitary sewer and potable water service feeds have not been modified since the original installation in 1983. The hotel service requirements of current naval and commercial vessels necessitate improvements to sanitary sewer and potable water services. If implemented, this project element would include the replacement of existing sanitary and potable water feeds currently connected to existing utility services, which would require minor trenching. At this time, the exact locations and details of the specific sanitary and potable water feeds that would be replaced is unknown. Therefore, it is assumed that these improvements could occur throughout the project site.

2.5 **Project Alternatives**

Alternatives analyzed in Chapter 7, Alternatives to the Proposed Project, of the Draft EIR include the No Project/No Build Alternative and the Reduced Project Alternative. Pursuant to the California Environmental Quality Act (CEQA), the EIR is required to identify the environmentally superior alternative. Although the No Project/No Build Alternative (Alternative 1) reduces the greatest number of significant impacts, CEQA requires that another alternative be identified when the environmentally superior alternative is the No Project/No Build Alternative. The Reduced Project Alternative (Alternative 2) reduces the second-largest number of impacts of the proposed project associated with biological resources, greenhouse gas (GHG) emissions and energy, hazards and hazardous materials, and hydrology and water quality. Therefore, Alternative 2 is considered the environmentally superior alternative, and overall impacts on environmental resources would be reduced compared to the proposed project (see Table 7-3 in Chapter 7 of the Draft EIR). However, the proposed project would also result in beneficial effects on the environment, including dredging to remove contaminated sediment from the project site, and efficiency improvements to the operations of the Pride of San Diego Drydock, which would reduce criteria pollutants emissions and GHG emissions over time. Without the improvements to the Pride of San Diego Drydock, substantial operational inefficiencies would still exist at the project site. In addition, Alternative 2 would not fully achieve most of the project objectives. Alternative 2 would only fully meet one of the project objectives (#3) and only partially meet the rest (#1, #2, #4, and #5).

Table 2-1 presents the impacts associated with the proposed project compared with the project alternatives. Table 2-2 provides a comparison of the project alternatives and their ability to meet the project objectives.

Environmental Resource	Project Determination	No Project/ No Build Alternative (Alternative 1)	Reduced Project Alternative (Alternative 2)
Air Quality and Health Risk	Less than Significant	+1	+1
Biological Resources	Less than Significant w/Mitigation	-1	-1
Greenhouse Gas Emissions and Energy	Less than Significant w/Mitigation	+1	+1
Hazards and Hazardous Materials	Less than Significant w/Mitigation	-1	-1
Hydrology and Water Quality	Less than Significant w/Mitigation	-1	-1
Land Use and Planning	Less than Significant	0	0
Noise and Vibration	Less than Significant	-1	0
Sea-Level Rise	Less than Significant	0	0
Transportation, Circulation, and Parking	Less than Significant	-1	0
Total ¹		-3	-1

Table 2-1. Summary Impacts of Alternatives Relative to the Proposed Project

Table 2-2. Summary Project Objective Comparison of Project Alternatives

Project Objective	No Project/ No Build Alternative (Alternative 1)	Reduced Project Alternative (Alternative 2)
1. Construct and operate shipyard repair facilities that maximize the use of existing waterways, available shoreline, and existing land.	No	Partially
2. Modernize the BAE Systems San Diego Ship Repair Yard by providing improved facilities to meet the needs of the current and anticipated ship fleet of military and commercial customers.	No	Partially
3. Enhance worker safety, customer security, and environmental protection programs through integration of relevant project elements.	No	Yes
4. Invest in new shipyard infrastructure that will enhance the short- and long-term attractiveness and viability of San Diego Bay and the region to military and commercial ship operators for construction and repair, consistent with the Port Master Plan.	No	Partially
5. Preserve jobs by maintaining the physical capacity and technical capability to support U.S. Naval presence and commercial maritime needs in San Diego.	No	Partially

2.6 Impact Summary

The proposed project would not result in any significant direct or cumulative project impacts with the implementation of mitigation measures. Table 2-3 presents the potentially significant impacts, the proposed mitigation measures, and the level of significance after mitigation.

Table 2-3. Project Impacts and Mitigation Measures

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
4.1 Air Quality a	nd Health Risk			
Project Impacts				
Conflict with an Applicable Air Quality Plan	Implementation of the proposed project would not conflict with an applicable air quality plan.	LS	No mitigation is required.	LS
Violate an Air Quality Standard	Implementation of the proposed project would not violate an air quality standard.	LS	No mitigation is required.	LS
Result in a Cumulatively Considerable Net Increase of a Criteria Pollutant	Implementation of the proposed project would not result in a cumulatively considerable net increase of criteria pollutants.	LS	No mitigation is required.	LS
Expose Sensitive Receptors to Substantial Pollutant Concentrations	Implementation of the proposed project would not expose receptors to substantial pollutant concentrations.	LS	No mitigation is required.	LS
Create Objectionable Odors	Implementation of the proposed project would not create objectionable odors affecting a substantial number of people.	LS	No mitigation is required.	LS
Cumulative Imp	acts			

The proposed project's incremental contribution to cumulative air quality and health risk impacts would not be cumulatively considerable.

lagua	Immont	Significance Before Mitigation	Mitigation Magguera(s)	Significance After Mitigation
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
4.2 Biological R	esources			
Project Impacts				
Substantial Adverse Effect on any Candidate, Sensitive, or Special-Status Species in Local or Regional Plans, Policies or Regulations	Impact-BIO-1: Water Quality Impairment Impacts on California Least Tern and California Brown Pelican Foraging. Construction of the proposed project could lead to water quality impairment in San Diego Bay, which would inhibit foraging of both California least tern and California brown pelican by increasing turbidity and making it more difficult to identify prey species within the waterside portion of the project site. This impact would be potentially significant.	PS	 MM-BIO-1: Implement Construction Measures to Eliminate Water Quality Impairment Impacts on California Least Tern and California Brown Pelican Foraging. Nesting birds are less stressed where foraging opportunities are available adjacent to nest locations. The following measures will enhance the birds' available forage and increase the likelihood of successfully fledging chicks. The project proponent shall implement the following construction measures in accordance with regulations, including CWA Sections 401 and 404, Rivers and Harbors Act Section 10, the NPDES permit, and Stormwater Management and Discharge Control Ordinance: The contractor shall deploy a turbidity curtain around the pile driving areas to restrict the visible surface turbidity plume to the area of construction and pile driving. It shall consist of a hanging ballastweighted curtain with a surface float line and shall extend from the surface into the water column without disturbing the bottom based on the lowest tide. The turbidity curtain shall meet the specifications for design, installation, use, performance, and/or modification outlined in the District's Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District (District 2019). The goal of this measure is to minimize the area in which visibility of prey by terns and pelicans is obstructed. The contractor shall follow all regulatory requirements to minimize reduction in water quality in San Diego Ray Construction of the 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			proposed project would include preparation and implementation of a Construction BMP Plan in accordance with the District's JRMP, and compliance with appropriate regulatory permits, including the CWA Section 401 Water Quality Certification, CWA Section 404 permit, and Rivers and Harbors Act Section 10 permit. A full explanation of these requirements can be found in Section 4.5, <i>Hydrology</i> <i>and Water Quality</i> .	
	Impact-BIO-2: Potential Disturbance or Destruction of Nests Protected by the Migratory Bird Treaty Act and California Fish and Game Code. Demolition of structures and noise from construction activity could impede the use of bird nesting sites during the nesting season (February 15 through September 30). The destruction of an occupied nest or disturbance to nesting activity would be considered a significant impact in violation of the MBTA or California Fish and Game Code. Therefore, this impact would be potentially significant.	PS	 MM-BIO-2: Avoid Nesting Season for Birds or Conduct Preconstruction Nesting Surveys. To ensure compliance with the MBTA and similar provisions under Sections 3503 and 3503.5 of the California Fish and Game Code, the project proponent shall conduct all construction activities between October 1 and February 14 (i.e., outside the nesting season) to the extent feasible. If construction activities are scheduled between February 15 and September 30, the project proponent shall implement the following during construction: The project proponent shall retain a qualified biologist (with knowledge of the species to be surveyed) who shall conduct a focused nesting bird survey within potential nesting habitat prior to the start of any construction activities. The survey shall be submitted to the District for review and approval of the survey and the buffer area, defined below, if any, prior to the commencement of construction on the project site. The nesting bird survey area shall include the entire limits of disturbance plus a 500-foot buffer, to ensure indirect impacts would be avoided. The nesting surveys shall be conducted within 1 week prior to initiation of construction activities and shall consist of a thorough inspection of the project area by a qualified ornithologist(s). The survey shall 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 occur between sunrise and 12:00 p.m., when birds are most active. If no active nests are detected during these surveys, only a brief letter report documenting the results shall be prepared and provided to the District. If there is a delay of more than 7 days between when the nesting bird survey is performed and construction activities begin, the qualified biologist shall resurvey to confirm that no new nests have been established. If the survey confirms nesting within 500 feet of construction activities, a no-disturbance buffer shall be established around each nest site to avoid disturbance or destruction of the nest until after the nesting season or a qualified ornithologist determines that the nest is no longer active. The size and constraints of the no-disturbance buffer shall be determined by the qualified biologist at the time of discovery, but shall not be greater than 500 feet. 	
	Impact-BIO-3: Potential Disruption of or Injury to Green Sea Turtles and Marine Mammals During Pile Driving Activities. Pile driving could generate underwater noise that has the potential to injure (Level A Harassment) or alter behavior (Level B Harassment) for marine mammals, as well as result in harassment take for green sea turtle. This impact would be potentially significant.	PS	 MM-BIO-3: Implement a Marine Mammal and Green Sea Turtle Monitoring Program During Pile Driving Activities. Prior to construction activities involving inwater pile installation or vibratory pile removal, the project proponent shall prepare a marine mammal and green sea turtle monitoring program for implementation. This monitoring program shall be submitted to the District for approval 60 days prior to commencing construction involving in-water pile installation or vibratory pile removal and shall include the following requirements: For a period of 15 minutes prior to the start of inwater construction, a qualified biologist, retained by the project proponent and approved by the District, shall monitor an impact radius around the active pile installation areas to ensure that special-status 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 species are not present. The qualified biologist must meet the minimum requirements as defined by the NOAA's <i>Guidance for Developing a Marine Mammal Monitoring Plan</i> (2017). The impact radius shall be established by determining the largest ZOI associated with in-water construction activities occurring that work day, as shown in Table 4.2-4. The construction contractor shall not start work if any observations of special-status species are made prior to starting pile installation. In-water pile driving within the shipyard shall begin with soft starts in accordance with Section 4.5 of the District's <i>Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District</i> (District 2019), gradually increasing the force of the pile driving. Monitoring by a qualified biologist for marine mammals and green sea turtles within appropriate ZOIs shall be implemented during all pile installation activities by identifying when any special-status species are approaching or within the appropriate ZOI, and by coordinating with construction crews to halt pile driving until the species have left this area. 	
	Impact-BIO-4: Loss of Open Water Habitat from Shipyard Operations . California least tern and other plunge diving fish predatory birds (e.g., pelicans) have the potential to utilize open water habitat within and adjacent to the project site for foraging opportunities. The increase in overwater coverage resulting from	PS	 MM-BIO-4: Implement Overwater Coverage Mitigation in Coordination with the Appropriate Resource Agencies and the District to Compensate for Loss of Open Water Habitat. The project proponent shall implement the following: 1. As required by applicable law or regulation, the project proponent shall consult with the appropriate resource agencies regarding mitigation of impacts associated with loss of beneficial uses 	LS

		Significance Before		Significance After
Issue	Impact the shipyard improvements is approximately 12,925 square feet, and would reduce the available open water habitat that is used for foraging by fish-eating avian species. This coverage also results in reduced	Mitigation	 Mitigation Measure(s) from overwater coverage and loss of open water habitat function. Prior to the commencement of construction activities for Project Elements 2, 6, and/or 9, the project proponent shall implement one of the following mitigation options or a combination 	Mitigation
	by fish-eating avial species. This coverage also results in reduced primary productivity in the water column and the seafloor. This impact would be potentially significant.		 project proponent shall implement one of the following mitigation options, or a combination thereof, that are listed below in order of preference of the District; however, selection of 2.A, 2.B, 2.C, and 2.D, or an equivalent combination thereof, as may be required through consultation with applicable resource agencies during permitting processes, would successfully reduce Impact-BIO-4 to a level below significance. The below options provide the minimum mitigation for overwater coverage impacts. One or more of the appropriate resource agencies may require additional or greater mitigation than specified in this mitigation measure. This in no way supersedes mitigation measures that may be required by state and federal agencies. A. Remove the equivalent amount of existing overwater coverage for Project Element 2 (6,960 square feet), Project Element 9 (80 square feet) within San Diego Bay, which would replace the area affected by the proposed project at a 1:1 mitigation ratio, subject to the District's review and approval. Should Project Elements 2, 6, and 9 all be implemented, a total 	
			of 12,925 square feet of existing overwater coverage shall be removed. If evidence is presented to the District that demonstrates that all or a portion of the required removal of overwater coverage is infeasible, the project proponent shall implement 2.B.	

		Significance Before			Significance After
Issue	Impact	Mitigation	Mitigat	tion Measure(s)	Mitigation
			В.	Restore or create the equivalent amount of	
				eelgrass habitat corresponding to the net	
				increase in overwater coverage for Project	
				Element 2 (6,960 square feet), Project Element	
				6 (5,885 square feet), and Project Element 9 (80	
				square feet) at a suitable location within San	
				Diego Bay at a 1:1 ratio, which would offset the	
				net increase in overwater coverage for these	
				project elements, subject to the District's	
				review and approval. Should Project Elements	
				2, 6, and 9 all be implemented, a total of 12,925	
				square feet of eelgrass habitat shall be restored	
				or created to offset the total net increase in	
				overwater coverage. Prior to the	
				commencement of construction activities for	
				Project Elements 2, 6, and/or 9, the project	
				proponent shall submit a mitigation plan for	
				review and approval by the District. The	
				mitigation plan at a minimum shall include a	
				description of the transplant site, eelgrass	
				mitigation requirements, eelgrass planting plan	
				(e.g., transplant sites, donor sites, reference	
				site), restoration methods (e.g., plant collection,	
				transplant units, planning eelgrass units),	
				timing of the restoration work, and a	
				monitoring program (e.g., establishment of	
				monitoring and mitigation success criteria). The	
				project proponent shall secure all applicable	
				permits and all applicable Real Estate	
				agreements for the mitigation site prior to	
				commencement of waterside construction.	
				Additionally, the project proponent shall ensure	
				that all fill materials proposed for discharge	
				into San Diego Bay for the development of the	
				mitigation site shall meet the requirements of	
				the U.S. Army Corps of Engineers' Evaluation of	

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
Issue	Impact	Mitigation	 Mitigation Measure(s) Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual (Inland Testing Manual). If evidence is presented to the District that demonstrates that restoration or creation of all or a portion of the required amount of eelgrass habitat specified above is infeasible, the project proponent shall implement 2.C. C. If a suitable in lieu fee program or mitigation bank within the Coastal Zone that is not yet available becomes available in the future, prior to construction of the proposed project, the project proponent shall purchase saltmarsh wetland or overwater coverage credits to offset the net increase in overwater coverage for Project Element 2 (6,960 square feet), Project Element 6 (5,885 square feet), and Project Element 9 (80 square feet), or 12,925 total square feet of overwater coverage should all of these project elements be implemented. If evidence is presented to the District that demonstrates that purchase of credits toward an in lieu fee program or mitigation bank is infeasible, the project proponent shall implement 2.D. D. Subject to the Board of Port Commissioners' approval and findings, the project proponent may purchase credits from the District's shading credit program established pursuant to Board Policy 735 at a fair market value equivalent to that of the proposed project's final shading total (i.e., less any reductions achieved by design modifications to the satisfaction of the appropriate resource agencies). The project proponent shall secure all applicable 	Mitigation
			permits for the mitigation of overwater coverage	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			prior to commencement of waterside construction. One or more of the appropriate resource agencies may require additional or greater mitigation than specified under options 2.A, 2.B, 2.C, and 2.D of this mitigation measure. This in no way supersedes mitigation measures that may be required by state and federal agencies.	
Substantial	Impact-BIO-4, as described above.	PS	Implement MM-BIO-4, as described above.	LS
Adverse Effect on any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, Regulations or by CDFW, NMFS, or USFWS	Impact-BIO-5: Potential Water Quality Impairment or Construction-Related Impacts on Eelgrass. Impacts on regrowth eelgrass within the project boundaries were previously mitigated offsite, and so project-related impacts on regrowth eelgrass within the project boundaries are less than significant. However, there are new growth eelgrass beds within the project site that extend beyond the spatial distribution of the eelgrass that was previously removed and mitigated for offsite. Eelgrass that was not part of the prior mitigation and could be impacted through shading or increases in turbidity associated with bottom disturbance during in-water construction activities for Project Elements 1 through 9. Suspended sediments cause turbidity that reduces light penetration through the water. When suspended sediment resettle, they can settle directly on eelgrass. Both of these mechanisms reduce the plant's ability to	PS	 MM-BIO-5: Implement Eelgrass Protection Measures. Prior to commencing in-water construction activities for Project Elements 1 through 9, the project proponent shall implement the following measures to ensure protection of eelgrass beds. Adhere to the Clean Water Act Section 404 permitting process and ensure California Eelgrass Mitigation Policy compliance through the Section 404 permit and coordination with the National Marine Fisheries Service. Perform a preconstruction eelgrass survey in accordance with the California Eelgrass Mitigation Policy. Temporarily install a silt curtain to contain turbidity during all in-water construction activities for Project Elements 1 through 9. Provide results of the preconstruction eelgrass survey during a contractor education meeting and instruct the contractor not to contact the bottom or stage vessels over eelgrass vegetated areas and instruct that the use of a silt curtain is necessary during all in-water construction activities for Project Elements 1 through 9. Perform a post-construction eelgrass survey in accordance with the California Eelgrass Mitigation Policy to validate protection of adjacent eelgrass bads following construction in the avent that 	LS

		Significance Before		Significance After
Issue	Impact photosynthesize and therefore can lead to reductions in bed density and cover. Moreover, if contractors stage	Mitigation	Mitigation Measure(s) unforeseen impacts to eelgrass occur, those impacts would be mitigated by increasing the amount of restoration or withdrawal of eelgrass mitigation	Mitigation
	vessels over the new growth eeigrass beds, impacts can occur through contact or shading.		subsection 2.B, or as may be otherwise required by applicable regulatory agencies to ensure CEMP compliance, and utilizing the methods and standards as may be required by the regulatory agencies.	
Substantial Interference with the Movement of any Native Resident or Migratory Fish or Wildlife Species	Implementation of the proposed project would not substantially interfere with the movement of fish or other wildlife species. Moreover, it would not substantially impede the use of native wildlife nursery habitat.	LS	No mitigation is required.	LS
Conflict with any Applicable Local Policies or Ordinances	Implementation of the proposed project would not conflict any applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or with the provisions of an applicable adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.	LS	No mitigation is required.	LS
Cumulative Imp	acts			
The proposed pro	oject's incremental contribution to cumul	ative biological	resource impacts would not be cumulatively considerable.	
4.3 Greenhouse	Gas Emissions and Energy			

Project Impacts

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Direct or Indirect Generation of Greenhouse Gas Emissions That May Have a Significant Impact on the Environment	Implementation of the proposed project would not result in the direct or indirect generation of greenhouse gas emissions that may have a significant impact on the environment.	LS	No mitigation is required.	LS
Consistency with Plans, Policies, and Regulatory Programs	Impact-GHG-1: Inconsistency with District Climate Action Plan and Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs. Project construction and operations would partially comply with plans, policies, and regulatory programs outlined in applicable District CAP measures and applicable state reduction goals and plans, policies, or regulations (AB 32 Scoping Plan Measures for 2020, State Regulatory Programs Post-2020, Policies from the 2017 Scoping Plan and Other Applicable Statewide Measures)for the purpose of reducing the emissions of GHGs. Therefore, prior to mitigation, the impact related to consistency with relevant plans, policies, and programs would be potentially significant.	PS	 MM-GHG-1: Implement Diesel Emissions Reduction Measures During Project Construction. The project proponent shall implement the following measures during project construction and, where specified below, submit reports to the District for its review and approval, evidencing compliance. A. The project proponent shall limit all construction equipment and haul truck idling times by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. The project proponent shall install clear signage regarding the limitation on idling time at the delivery driveway and loading areas and submit quarterly reports of violators to the District. BAE System supervisors shall enforce this measure, and repeat violators shall be subject to penalties pursuant to the California Airborne Toxics Control Measure, 13 CCR 2485. The project proponent shall submit evidence of the use of diesel reduction measures to the District's Development Services Department through annual reporting, with the first report due 1 year from the date of project completion. B. The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' 	LS

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
Issue		Significance Before Mitigation	 Mitigation Measure(s) specifications. Prior to the commencement of construction activities, with respect to using diesel-powered vehicles or equipment, the project proponent shall verify that all vehicles and equipment has been checked by a mechanic experienced with such equipment and determined to be running in proper condition prior to admittance into the delivery driveway and loading areas. The project proponent shall submit a report by the mechanic experienced with such equipment of the condition of the construction and operations vehicles and equipment to the District's Development Services Department prior to commencement of their use. MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures. As a condition of all discretionary actions and/or Coastal Development Permits, the project proponent shall be required to implement the following measures to be consistent with the Climate Action Plan: A. Reduce indoor water consumption to 20 percent lower than baseline buildings (defined by Leadership in Energy and Environmental Design [LEED] as indoor water use after meeting Energy Policy Act of 1992 fixture performance requirements) through use of low-flow fixtures in all administrative and common-area bathrooms. B. Comply with AB 341, the City of San Diego Construction and Demolition Debris Deposit Ordinance. This shall include implementing a recycling program to support the statewide goal of divertion 75 encreated for a low protection and performance of the first performance of the city of San Diego Recycling Dreinance of the city of San Diego Recycling Ordinance. This shall include implementing a recycling program to support the statewide goal of divertion for the statewide	Significance After Mitigation
			recycling program to support the statewide goal of diverting 75 percent of solid waste from landfills by 2020 in accordance with AB 341. This measure shall be applied during construction and operation of the proposed project.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 C. Use only fluorescent lights, light-emitting diodes (LEDs), compact fluorescent lights (CFLs), or the most energy-efficient lighting that meets required lighting standards and is commercially available. This measure also requires replacement of existing lighting on the project site if not already highly energy efficient. 	
			D. Implement a Transportation Demand Management (TDM) Plan during construction that includes elements such as the promotion of ride sharing and carpooling, restricts PM peak-hour trips, and provides subsidized transit passes for construction workers to reduce worker trips and parking demand.	
			E. Use recycled, regional, and rapidly renewable materials where appropriate during project construction.	
			F. Install occupancy sensors for all vending machines in new buildings at the project site.	
			G. Implement onsite renewable energy at new buildings, unless the system cannot be built in light of structural and operational constraints.	
			H. Incorporate energy efficiency design features that exceed the most recent Title 24 California Building Energy Efficiency Standards. Measures that may be implemented include:	
			 High-performance glazing with a low solar hear gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination; 	:
			 Increased insulation; 	
			• Cool roofs with an R value of 30 or better;	
			 Sun shading devices, as appropriate; High-efficiency heating contilating and air 	
			conditioning systems and controls;	

	_	Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
			 Programmable thermostats; 	
			 Variable-frequency drives; and 	
			 High-efficiency indoor and outdoor lighting and 	
			control systems. Ensure all outdoor lighting is	
			equipped with LED fixtures.	
			MM-GHG-3: Use Modern Vessels and Dredgers. Prior	
			to commencing dredging during waterside construction,	
			the project proponent shall ensure that tugboats, survey	
			vessels, and dredgers for use during the duration of all	
			dredging activities meet Tier 3 or better (cleaner)	
			emission standards. If Tier 3 or better (cleaner)	
			tugboats, survey vessels, and dredgers are not available	
			within 200 miles of the BAE Systems leasehold for the	
			duration of all dredging activities, the project proponent	
			shall prioritize use of equipment that is maintained and	
			properly tuned in accordance with manufacturers'	
			specifications. The project proponent shall document	
			and submit evidence to the District's Development	
			Services Department prior to commencement of	
			waterside construction activities that tugboats, survey	
			vessels, and dredgers meeting Tier 3 or better standards	
			are not available for use during the duration of all	
			dredging activities. Regardless of the equipment used,	
			the project proponent shall verify that all equipment has	
			been checked by a mechanic experienced with such	
			equipment and determined to be running in proper	
			The project proposed shall submit a report proposed	
			by the mechanic experienced with such equipment of	
			by the mechanic experienced with such equipment of	
			une condition of the constituction and operations	
			Services Department prior to common company of their	
			use.	
Result in a	Implementation of the proposed	LS	No mitigation is required. However, mitigation	LS
Wasteful,	project would not result in the		measures MM-GHG-1 through MM-GHG-3 would	

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
Inefficient, or Unnecessary Consumption of Energy Resources, or Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency	wasteful, inefficient, and unnecessary consumption of energy that could result in potentially significant environmental effects, nor would it conflict with state and local renewable energy and energy efficiency plans.		further reduce the project's energy demand and reduce fossil fuel use.	
Cumulative Impa	acts			
Consistency with Plans, Policies, and Regulatory Programs	Impact-C-GHG-1: Inconsistency with District Climate Action Plan and Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs. The proposed project would partially comply with plans, policies, and regulatory programs outlined in the District's CAP, the Scoping Plan, and other plans, policies, and regulatory programs adopted by CARB for the purpose of reducing the emissions of GHGs.	PS	Implement MM-GHG-1 , MM-GHG-2 , and MM-GHG-3 , as described above.	LS
4.4 Hazards and	Hazardous Materials			
Project Impacts				
Release of Hazardous Materials into the Environment	Impact-HAZ-1: Landside Potential to Encounter Hazardous Materials in Soil and/or Groundwater. Based on documentation compiled from database searches, hydrocarbon- impacted soils are present south of Pier 3 along the bulkhead, related to	PS	MM-HAZ-1: Implement a (Landside) Soil and Groundwater Management Program. The project proponent shall retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer (licensed professional) with experience in contaminated site redevelopment and restoration to oversee the implementation of a <i>Soil and Groundwater</i>	LS

	Significance Before		Significance After
Issue Impact	Mitigation	Mitigation Measure(s)	Mitigation
historic unauthorized rele Construction and excavat area may encounter conta soils. The disturbance of contaminated soils could result in a release of haza materials and exacerbate hazardous conditions at t site. Furthermore, historia information reviewed ind project site has a history of disposal, and releases of h materials that have affect and/or groundwater on s addition, adjacent offsite have involved handling, d releases of hazardous ma could have migrated to th site, potentially resulting contaminated soil and/or groundwater. Therefore, undocumented contamina and/or groundwater may encountered during lands construction activities, wh potentially result in a rele hazardous materials and the existing hazardous co the project site. The poter encounter prior documen undocumented contamina be a significant impact.	ases. on in this minated potentially dous the existing the project al cates the f handling, azardous to soil te. In properties sposal, and erials that project n ted soils be de ich could ase of xacerbate aditions at tial to reed or nts would	 Management Program, which must be approved by the District. The Soil and Groundwater Management Program will be implemented prior to and throughout the duration of landside construction activities for the proposed project. Each of the elements included in the Soil and Groundwater Management Program shall include the following elements, each of which have specific timing mechanisms as identified in the description of each element below: A. Site Contamination Characterization Report B. Soil and Groundwater Testing and Profiling Plan C. Soil and Groundwater Disposal Plan D. Site Worker Health and Safety Plan E. Site-Specific Community Health and Safety Program F. Monitoring and Reporting Program G. Project Closeout Report A. Site Contamination Characterization Report (Contamination Characterization Report) shall be prepared which delineates the vertical and lateral extent and concentration of landside residual contamination in project site areas proposed for construction and/or ground disturbance, including, but not limited to, areas with unauthorized releases identified along the landward side of the southern bulkhead between Pier 3 and Pier 4. The Contamination Characterization Report shall be prepared prior to commencing landside construction consistent with the ASTM D5730-04 guidance, the DTSC Preliminary Endangerment Assessment Guidance Manual, and/or other similar guidance for industry standards. The Contamination (1) historical records review and (2) investigation and bitorical accords review and (2) investigation and bitorical accords review and (2) investigation and bitorical accords review and (2) investigation activation accords review and bitorical accords review and bitorical accords review and bitorical accords review and provide accords review and bitorical accords review and (2) investigation accords review and bitorical accords review and (2) investigation accords review and bitorical accords revi	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			performed on the project site. If the licensed professional concludes, after the initial characterization based on past records and reports, that either (1) there are data gaps, or (2) historical records do not accurately characterize potential site contamination, new soil and groundwater sampling to characterize the existing vertical and lateral extent and concentration of landside residual contamination must be completed. Any sampling and analysis conducted must be consistent with applicable regulations utilizing the methodologies outlined in ASTM Standard E1903, County of San Diego DEH <i>Site Assessment and Mitigation (SAM)</i> <i>Manual</i> , or some other well-accepted methodology for sampling and analysis leading to site characterization, as approved by the District. The project proponent also shall enroll in the Voluntary Assistance Program (VAP) with the County of San Diego Department of Environmental Health and shall submit the results of the Contamination Characterization Report to DEH staff for regulatory concurrence of results.	
			B. A Soil and Groundwater Testing and Profiling Plan (Testing and Profiling Plan) shall be prepared for those soils and materials that are proposed to be disposed of during construction. The Testing and Profiling Plan shall be prepared after the Contamination Characterization Report and shall utilize the information in the Contamination Characterization Report and include protocols for independent testing of soils and materials identified for disposal for all potential contaminants of concern, including CA Title 22 metals, PAHs, volatile organic compounds, pesticides, PCBs, semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. The Testing and Profiling	

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
Issue	Impact	Before Mitigation	 Mitigation Measure(s) Plan shall document compliance with CA Title 22 for proper identification and segregation of hazardous and solid waste as needed for acceptance at a CA Title 22-compliant offsite disposal facility. C. A Soil and Groundwater Disposal Plan (Disposal Plan) shall be prepared following the Testing and Profiling Plan, which shall describe the process for excavating, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. The Disposal Plan shall be prepared in accordance with the Testing and Profiling Plan and shall adhere to applicable regulatory requirements and standards, including CA Title 22 Division 4.5, and DOT Title 40 CFR Part 263, CAC Title 27, and 	After Mitigation
			ensure compliance with applicable regulations for the disturbance, handling of contaminated	
			materials, prevention of cross contamination, spills, or releases, such as segregation into separate piles	
			for waste profile analysis based on organic vapor,	
			and visual and odor monitoring. All excavation activities shall be actively monitored for the	
			potential presence of contaminated soils and for	
			compliance with the Disposal Plan. If disposal of	
			contaminated soils or groundwater is required, it	
			shall be done under the oversight of the county of San Diego Department of Environmental Health	
			which oversees hazardous materials issues in San	
			Diego County.	
			D. A Site Worker Health and Safety Plan (Safety Plan) shall be prepared prior to initiation of construction	
			to ensure compliance with 29 CFR Part 120,	
			Hazardous Waste Operations and Emergency	
			response regulations for Sile Workers at uncontrolled bazardous waste sites. The Safety Plan	
			shall be prepared after, and shall be based on, the	
			Contamination Characterization Report and the	

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
			planned site construction activity to ensure that site workers potentially exposed to site contamination in soil and groundwater are trained, equipped, and monitored during site activity. The training, equipment, and monitoring activities described in the Safety Plan shall ensure that workers are not exposed to contaminants above personnel exposure limits established by Table Z, 29 CFR Part 1910.1000. The Safety Plan shall be signed by and implemented under the oversight of a California State Certified Industrial Hygienist.	
			 E. A Site-Specific Community Health and Safety Program (Safety Program) shall be prepared prior to the District Development Services Department's approval of the project's landside working drawings, which addresses the chemical constituents of concern for the project site in order to minimize the exposure of chemical constituents during construction to the surrounding community. The Safety Program shall be prepared in accordance with the County of San Diego DEH's Site Assessment and Mitigation Manual (2009) and EPA's SW-846 Manual (1986). The Safety Program shall include detailed plans on environmental and personal air monitoring, dust control, and other appropriate construction means and methods to minimize the public's exposure to the chemical constituents of concern. The Safety Program shall be reviewed, approved, and monitored for compliance by the District. Following District Environmental Protection Department approval, the project proponent shall implement the Safety Program throughout ground-disturbing construction activities and any other construction activity that may encounter or use chemicals of concern. The contractor shall utilize a Cartified Industrial 	

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
			Hygienist with significant experience with chemicals of concern on the project site to actively monitor compliance with the Safety Program and ensure its proper implementation during project construction activities that use substances that may include chemicals of concern.	
			F. <i>Monitoring and Reporting Program.</i> During and upon completion of landside construction, the project proponent shall prepare a Monitoring and Reporting Program and submit it to the District's Development Services Department and the RWQCB for review and approval. The Monitoring and Reporting Program shall document implementation of the Soil and Groundwater Management Program. The Monitoring and Reporting Program shall include the project proponent's submittal of monthly reports (during project elements that include active landside disturbance activities, starting with the first ground disturbance activities and ending at the completion of ground disturbance activities of a project element) to the District's Development Services Department, signed and certified by the licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer, as applicable, documenting compliance with the provisions of the Soil and Groundwater Management Program and the overall Soil and Groundwater Management Program.	
			G. <i>Project Closeout Report</i> . Within 30 days of completion of landside construction activities the project proponent shall prepare a Project Closeout Report and submit it to the District's Development	
			Services Department for review and approval. The Project Closeout Report shall summarize all disturbance, demolition, and construction activity at the site and document implementation of the Soil	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			and Groundwater Management Program. The Project Closeout Report would also include the reports and closure documentation associated with the VAP case opened for the site, including the correspondence with the DEH and the closure letter.	
	Impact-HAZ-2: Waterside Potential to Encounter Hazardous Materials in Sediment. Historical information, reports, and site assessments compiled from database searches indicate that it is reasonably foreseeable that contaminated sediments may be encountered during in-water construction activities including dredging and pile installation/removal associated with Project Element 1 (Pride of San Diego Drydock Dredging/Mooring), Project Element 2 (Pride of San Diego Wharf Replacement/Realignment), Project Element 3 (Fender System Repair and Replacement), Project Element 4 (Pier 3 South Nearshore Dredging), Project Element 5 (Pier 3 Mooring Dolphin), Project Element 6 (Pier 3 North Lunchroom Wharf Replacement and Realignment), Project Element 7 (Quay Wall Modifications), Project Element 8 (Port Security Barrier Replacement), and Project Element 9 (Small Boat Mooring Float Replacement). As such, in-water construction activities that disturb the sediment would potentially result in a release of hazardous materials and create a potentially significant hazard	PS	 MM-HAZ-2: Implement a Dredging Management Program. The project proponent shall implement a Dredging Management Program (DMP) that complies with applicable permit requirements, including the Section 404 permit and the Section 401 water quality certification. The DMP shall be implemented prior to, during, and upon completion of dredging activities for the proposed project. A clamshell dredger shall be used for all project dredging activities. The DMP shall contain the following elements, each of which have specific timing mechanisms as identified in the description of each element below: A. Dredging Operations Plan. Prior to commencement of dredging activities, the project proponent shall develop a Dredging Operations Plan that identifies the standard operating procedures (SOPs) that will be implemented during dredging activities. The Dredging Operations Plan shall be submitted to the District's Development Services Department for review and approval prior to commencing dredging activities. The Dredging Operations Plan shall include step-by-step procedures to complete dredging operations safely, in an efficient manner, and to avoid releases of hazardous materials into the environment. The SOPs shall include guidance with respect to, among other things, the following: Proper operation of the dredge bucket; Proper positioning of the barge vessel to minimize propeller wash; and 	LS

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
	to the environment, regardless of whether it occurs within the CAO area or not, by bringing and releasing subsurface sediment contaminants to the surface of the Bay floor or exacerbating the existing hazardous conditions by spreading contaminated sediment; impacts would be significant.		 Placement and maintenance of double silt curtains. In addition, the Dredging Operations Plan shall identify sediment control BMPs to be implemented during dredging activities. The project proponent, or their contractor, shall at a minimum, implement the following BMPs for the safe handling of dredged material: Sediment Unloading. During dredging activities, the contractor shall reduce water column impacts by controlling the swing radius of the unloading equipment, using a spillage plate, and using a power wash unit to reduce impacts related to spillage from the excavator arm onto transport vehicles. Filling Transport Vehicles. During dredging activities, the contractor shall ensure that truck volumes are limited to 90 percent based on visual observations, and that trucks shall be covered and secured per Caltrans regulations during transport to the disposal facility. Sediment Loading. During dredging activities, the contractor shall ensure that trucks are loaded within a constructed loading zone to confine sediment spilled during the loading process. 	
			B. <i>Contingency Plan</i> . Prior to commencement of dredging activities, the project proponent shall develop a Contingency Plan, which shall be implemented in the case of equipment or operational failures, such as, but not limited to. silt	
			curtain damage, spillage of sediment resulting from overloading the material barge, contact with sediment on or around the materials barge during loading, equipment failure of bucket or shear pin	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 during loading procedures, or material barge or tugboat collision with another vessel. The Contingency Plan shall be submitted to the District's Development Services Department for review and approval prior to commencing dredging activities. The Contingency Plan shall contain step-by-step procedures for response to equipment or operational failures and shall reduce the potential for the release of sediments to the water column. C. <i>Health and Safety Plan for Dredging Activities</i>. Prior to the commencement of dredging activities, the project proponent shall prepare a Health and Safety Plan for Dredging Activities (Health and Safety Plan) and submit the plan to the District's Environmental Protection Department for review and approval. Following District approval, the project proponent shall implement the Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan shall be prepared in general accordance with Federal Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120) and Title 8 California Code of Regulations (CCR) Section 5192. The Health and Safety Plan shall provide procedures for workers for safe operation, personal protection, and emergency response during dredging operations. 	
			 D. Communication Plan. Prior to the initiation of dredging activities, the project proponent or their contractor shall prepare a Communication Plan and operation guidelines for communications between the U.S. Coast Guard and Harbor Police and all vessel operators to ensure the safe movement of project vessels from the dredge site to the unloading area. The Communication Plan shall be submitted to the District's Development Services Department and 	

Harbor Police for review and approval prior to	
 commencing dredging activities. After the District's approval, the contractor shall implement the Communication Plan throughout the duration of dredging activities. E. Sediment Sampling and Remediation. Following the completion of dredging, the project proponent must adhere to the following: 	
 If no in-water construction work that could potentially disturb sediment is proposed for a dredging area (a specific area that was subject to dredging within the project site), or if proposed in-water construction work proposed for the dredging area will not commence within 90 days after the completion of dredging, sediment sampling and testing shall be conducted to determine whether contaminated sediments may have been exposed by dredging activities. Any sampling shall be conducted in accordance with Investigative Order No. R9- 2017-0083 (IO), utilizing the methods required by the IO. The sediment samples shall be tested for the presence of the COCs identified in the CAO R9-2012-0024. A report explaining the sampling methodology used and containing the results of any sampling shall be provided to the RWQCB for review and approval, and to the District for concurrence. If no subsequent in- water construction work is proposed within the dredging area, the project proponent must comply with mitigation measure MM-HAZ-5. 	
E	 approval, the confluctor blant implement the Communication Plan throughout the duration of dredging activities. Sediment Sampling and Remediation. Following the completion of dredging, the project proponent must adhere to the following: If no in-water construction work that could potentially disturb sediment is proposed for a dredging area (a specific area that was subject to dredging within the project site), or if proposed in-water construction work proposed for the dredging area will not commence within 90 days after the completion of dredging, sediment sampling and testing shall be conducted to determine whether contaminated sediments may have been exposed by dredging activities. Any sampling shall be conducted in accordance with Investigative Order No. R9-2017-0083 (IO), utilizing the methods required by the IO. The sediment samples shall be tested for the presence of the COCs identified in the CAO R9-2012-0024. A report explaining the sampling methodology used and containing the results of any sampling shall be provided to the RWQCB for review and approval, and to the District for concurrence. If no subsequent inwater construction work is proposed within the dredging area, the project proponent must comply with mitigation measure MM-HAZ-5. The project proponent must also comply with

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
			mitigation measure MM-HAZ-3 prior to any in- water construction.	
			2. If in-water construction work that may potentially disturb sediment is proposed for a dredging area and will commence within 90 days after the completion of dredging, the project proponent must implement a Sediment Management Program, including sampling, as required by mitigation measure MM-HAZ-3 , and must comply with all other mitigation measures.	
			 MM-HAZ-3: Implement a (Waterside) Sediment Management Program. The project proponent shall retain a licensed Professional Engineer with substantial experience (i.e., more than 5 years) in marine sediment contamination, sediment sampling, and contamination remediation to oversee the implementation of a Sediment Management Program. The Sediment Management Program will be implemented prior to and throughout the duration of waterside construction activities for the proposed project. The Sediment Management Program shall include the following elements, each of which have specific timing mechanisms as identified in the description of each element below: A. Sampling Analysis Plan B. Marine Sediment Contamination Characterization Report C. Contaminated Sediment Management Plan D. In-Water Activity Specific Procedures 	
			E. Post-Construction Sampling and Analysis	

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
			A. Sampling and Analysis Plan (SAP). Prior to in-water demolition or construction that may potentially disturb sediment, a licensed Professional Engineer shall (1) delineate the area of potential disturbance (Disturbance Area); (2) develop an SAP, which must be consistent with the sampling requirements of IO R9-2017-0083; and (3) perform sediment sampling. The SAP shall set forth the methodology to be used, the locations where sampling would occur, and analysis of the COCs so that it is consistent with the sampling requirements of IO R9-2017-0083, and proper decontamination and disposal procedures. The sediment samples shall be tested for the presence of the COCs identified in the CAO R9-2012-0024. The sampling area and sampling methodology shall identify sample locations determined to be appropriate, at the discretion of the District and RWQCB (or other applicable agencies), to adequately characterize any Disturbance Area associated with project elements. All sediment sampling and analysis must occur after dredging activity and prior to other sediment-disturbing construction activity and shall be performed in accordance with the requirements of the SAP. The SAP must be submitted to the RWQCB for review and approval, and to the District for concurrence.	
			 The results of all sediment sampling shall be documented in a report and submitted to the RWQCB for their review and approval prior to any marine-side sediment-disturbing activities. B. Marine Sediment Contamination Characterization Report (Sediment Characterization Report). Prior to in-water construction (excluding dredging activities), the licensed Professional Engineer shall prepare a Sediment Characterization Report 	

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
Issue	Impact	Significance Before Mitigation	 Mitigation Measure(s) delineating the vertical and lateral extent and concentration of the project site's potential COCs in areas where pile driving or removal and other sediment-disturbing activities are proposed as part of this project. The Sediment Characterization Report shall be developed taking into account the site assessment reports, final cleanup reports, and post-remediation monitoring reports associated with the San Diego Shipyard Sediment Cleanup – North Shipyard, and sediment sampling performed per the SAP. The project proponent shall submit the Sediment Characterization Report to the RWQCB (and any other appropriate regulatory agencies) for approval as representative of sediment conditions in Disturbance Areas. C. Contaminated Sediment Management Plan (Sediment Management Plan). If contaminated sediment is identified in the Sediment Characterization Report in any of the proposed project Disturbance Area, the project proponent shall prepare a Sediment Management Plan for the District's and RWQCB's approval. Once approved, the Sediment Management Plan shall be implemented by the appropriate overseeing regulatory agencies, including the District. The Sediment Management 	Significance After Mitigation
			Plan shall describe in detail the methods to be	
			employed to prevent waterside construction activity from adversely affecting or exposing the gravelly- sand or sand-covered contaminated sediment, or	
			disturbing contaminated sediment, as identified in the Sediment Characterization Report, and the	
			monitoring that will occur postconstruction.	
			D. In-Water Activity–Specific Procedures (Pile Installation or Removal). Pile installation or removal shall be conducted in a manner that implements	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	•		applicable permit requirements, including the Section 404 permit and CWA Section 401 Wate Quality Certification. The following measures a required based on the type of pile installation, removal, that occurs.	CWA er ire or
			OR	
			 Internal Jetting. A. Internal jetting shall not be allowed un the project proponent can demonstrat the District's satisfaction, there are no feasible alternatives to the use of interjetting. B. Turbidity curtains shall be installed in compliance with the District's Best Management Practices and Environmed Standards for Overwater Structural Reand Maintenance Activities for Existin Facilities Conducted by the San Diego Unified Port District (District 2019). 	nless re, to rnal ental epair g Port
			OR	
			3. Spudding. Spudding shall not be allowed unless the project proponent can demonst to the District's satisfaction, there are no feasible alternatives to the use of spudding no alternatives to spudding are feasible, w spuds are lifted during in-water construct: they shall be lifted slowly—at least a quar- the speed that spuds are lifted during nor operation. Before the spud reaches the subsurface of the Bay floor during remova operator shall conduct spud extraction in 2	rate, g. If hen ion, ter of nal l, the 2-

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
		maganon	 minute intervals (repeated 2-minute extraction followed by 2-minute pause) to reduce the disturbance of Bay sediment. E. Post-Construction Sampling and Analysis. At the conclusion of construction activities within a Disturbance Area, the project proponent shall conduct post-construction sediment sampling that adequately characterizes potential contamination resulting from construction activities (and dredging activities if the in-water construction occurred within a dredging area) to determine if in-water construction or disturbance activities resulted in COCs in excess of the levels above the levels set forth in CAO R9-2012-0024. All sampling shall be conducted in accordance with IO No. R9-2017-0083, utilizing the methods required by the IO. The project proponent shall prepare, for submittal to and approval by the District and RWQCB, a Post-Construction Sampling Plan that shall outline the methodology to be used, the locations where sampling would occur. and the COCs to be analyzed 	THEBUTON
			consistent with CAO R9-2012-0024.	
			MM-HAZ-4: Comply with Federal and State Permits. Prior to in-water construction, the project proponent shall obtain all federal and state permits required for in- water construction activities, provide evidence of such permits to the District, and demonstrate to the District compliance with all permit conditions during in-water construction.	
			MM-HAZ-5: Implement Post-Dredging and/or Post- Waterside Construction Remediation. If, after the completion of any dredging activity for a dredging area or in-water construction work, consistent with the requirements of mitigation measures MM-HAZ-2 and MM-HAZ-3, site sampling shows that concentrations of COCs exceed those set forth in CAO R9-2012-0024 (or	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			other levels as prescribed by the RWQCB), the project proponent shall propose remediation consistent with CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), subject to approval by the RWQCB, and any other agencies with jurisdiction over the site contamination, and concurrence by the District. The project proponent's remediation approaches may include, but are not limited to, additional dredging, placement of sand cover, or Enhanced Monitored Natural Recovery sand containing active carbon. If remediation is required, the remediation shall be conducted with oversight from the appropriate local, state, or federal regulatory agency. In addition, documentation evidencing the remediation work and completion thereof shall be submitted to the District. The project proponent shall monitor the remediation for its effectiveness, consistent with the standards set forth by CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), for a period consistent with guidance from the regulatory agency with jurisdiction. A monitoring report shall be submitted to the District and the RWQCB for their review on a monthly basis, or at a frequency determined appropriate by the relevant agency overseeing the remediation activities.	
			If, after the completion of any dredging activity for a dredging area or in-water construction work within a Disturbance Area, consistent with the requirements of mitigation measures MM-HAZ-2 and MM-HAZ-3 , concentrations of COCs in the area of potential contamination do not exceed those levels set forth in CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), no further mitigation is required.	

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Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Be Located on a Site that Is Included on a List of Hazardous	Impact-HAZ-1, as described above.	PS	Implement MM-HAZ-1 , as described above.	LS
Materials Sites Compiled Pursuant to Government Code Section 65962.5	Impact-HAZ-2 , as described above.	PS	Implement MM-HAZ-2 through MM-HAZ-5 , as described above.	LS
Cumulative Impa	acts			
Release of Hazardous Materials into the Environment	Impact-C-HAZ-1: Cumulatively Considerable Contribution to Waterside Exposure of Hazardous Materials in Sediment. Due to the mobile nature of sediment in the Bay, and the extent of known and suspected historical contamination in the Bay, there is a potential that extensive in-water work proposed as part of the project would result in a cumulatively considerable contribution to the cumulative hazardous materials impacts when combined with past, present and reasonably foreseeable future projects.	PS	Implement MM-HAZ-2 through MM-HAZ-4 , as described above.	LS
4.5 Hydrology an	nd Water Quality			
Project Impacts				
Violation of Water Quality Standards or Waste	Impact-HWQ-1: Degradation of Water Quality from Waterside Sediment Contamination. Historical information, reports, and site	PS	Implement MM-HAZ-2 through MM-HAZ-5, as described above.	LS

		Significance		Significance
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
Issue Discharge Requirements	Impact assessments compiled from database searches indicate that it is reasonably foreseeable that contaminated sediments may be encountered during in-water construction activities, including such activities as dredging and pile installation/removal associated with Project Element 1 (Pride of San Diego Drydock Dredging/Mooring), Project Element 2 (Pride of San Diego Wharf Replacement/Realignment), Project Element 3 (Fender System Repair and Replacement), Project Element 4 (Pier 3 South Nearshore Dredging), Project Element 5 (Pier 3 Mooring Dolphin), Project Element 6 (Pier 3 North Lunchroom Wharf Replacement and Realignment), Project Element 7 (Quay Wall Modifications), Project Element 8 (Port Security Barrier Replacement), and Project Element 9 (Small Boat Mooring Float Replacement). It should be noted that Project Element 3 could include the replacement of fenders without the need to also replace piles, in which case no sediment disturbance would occur. As such, in-water construction activities that disturb the sediment would potentially result in a release of	Before Mitigation	Mitigation Measure(s)	After Mitigation
	contaminated sediment into the water column and substantially degrade water quality. Impacts would be			
	significant.			
Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
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	Impact-HWQ-2: Removal of Creosote Piles Could Result in Resuspension of Sediments Contaminated with PAHs. Existing piles could contain creosote and removal of the piles could result in resuspension of sediments contaminated with PAHs. The chemicals from the existing piles could have leached into the adjacent sediments or leach into the water column during removal. Impacts would be significant.	PS	MM-HWQ-1: Remove and Dispose of Creosote Piles Properly. During pile extraction, if piles cannot be completely removed, they shall be cut at least 1 foot below the mud line. If treated piles are fully extracted or if they are cut below the mudline, the project proponent or contractor shall cap the holes or piles with appropriate material such as clean substrate (sand and/or gravel) or pile caps. Removed creosote-treated piles shall be disposed of in a manner that precludes their further use. The piles must be cut into manageable lengths (4-foot lengths are preferable) for transport and disposal in an approved upland location. Extracted piles and debris should be placed in a lined stockpile area or directly loaded into transport container or vehicle. Appropriate controls should be used to prevent runoff from leaving the stockpile and entering surface water or ground water.	LS
Alter the Existing Drainage Pattern of the Site or Area	Implementation of the proposed project would not 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 in a manner that would: (1) result in substantial erosion or siltation on or off site; (2) result in flooding on or off site; (3) create or contribute runoff water in exceedance of stormwater drainage capacity; or (4) impede or redirect flood flows.	LS	No mitigation is required.	LS
Release of Pollutants due to Project Inundation	Implementation of the proposed project would result in the release of pollutants due to project inundation	LS	No mitigation is required.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	in a flood hazard, tsunami, or seiche zone.			
Conflict with or Obstruct Implementation of a Water	Impact-HWQ-1, as described above.	PS	Implement MM-HAZ-2 through MM HAZ-5 , as described above.	LS
Plan or Sustainable Groundwater Management Plan	Impact-HWQ-2, as described above.	PS	Implement MM-HWQ-1 , as described above.	LS
Cumulative Imp	pacts			
Violation of Water Quality Standards or Waste Discharge Requirements	Impact-C-HWQ-1: Cumulatively Considerable Contribution to Degradation of Water Quality from Waterside Sediment Contamination. The disturbance of potentially contaminated sediments that would become suspended in the water column, resulting in the release of hazardous pollutants and the degradation of water quality, would be considered a cumulatively considerable impact.	PS	Implement MM-HAZ-2 through MM HAZ-5 , as described above.	LS
	Impact-C-HWQ-2: Cumulatively Considerable Contribution to Water Quality Impacts from the Removal of Creosote Piles. The removal of creosote-treated piles may result in the resuspension of sediments that have been contaminated due to the leeching of creosote, which could result in a cumulatively considerable water quality impact when combined	PS	Implement MM-HWQ-1 , as described above.	LS

Issuo	Impact	Significance Before Mitigation	Mitigation Moasuro(s)	Significance After Mitigation
15500	with past, present, and reasonably foreseeable future projects.	Mitgation	Mugation Measure(s)	Mitigation
4.6 Land Use and	d Planning			
Project Impact				
Cause a Significant Environmental Impact Due to Conflict with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect	Implementation of the proposed project would not result in 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.	LS	No mitigation is required.	LS
Cumulative Imp	acts			
The proposed pro	oject's incremental contribution to cumul	ative land use ar	nd planning impacts would not be cumulatively considerable	e
4.7 Noise and Vi	bration			
Project Impacts				
Generate Temporary or Permanent Increase in Noise Levels in Excess of Established Standards	Implementation of the proposed project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project, in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies.	LS	No mitigation is required.	LS
Generate Excessive	Implementation of the proposed project would not generate excessive	LS	No mitigation is required.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Groundborne Vibration or Groundborne Noise Levels	groundborne vibration or groundborne noise levels.	Milgation	mugation measure(s)	migation
Exposure of People Residing or Working in the Project Area to Excessive Noise Levels from a Private Airstrip, Public Airport, or Public Use Airport Cumulative Imp	Implementation of the proposed project would not expose people residing or working in the project area to excessive noise levels from a private airstrip, public airport, or public use airport.	LS	No mitigation is required.	LS
The proposed pro	oject's incremental contribution to cumul	ative noise and v	vibration impacts would not be cumulatively considerable.	
Project Impacts				
Exacerbate Existing or Projected Damage to the Environment due to Predicted Climate Change Effects, Particularly Sea Level Rise	Implementation of the proposed project would not exacerbate any existing and/or projected damage to the environment, including existing structures, sensitive resources, and human health, due to predicted climate change effects, particularly sea-level rise.	LS	No mitigation is required.	LS
Consistency with Applicable Sea Level Rise Policies of the	Implementation of the proposed project would not be inconsistent with the applicable sea-level rise policies of the CCC or other land use	LS	No mitigation is required.	LS

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
CCC or Other Land Use Plans, Policies, or Regulations Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect from Sea Level Rise	plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect from sea-level rise.			
Cumulative Impa	acts			
The proposed pro	oject's incremental contribution to cumula	ative sea-level ri	ise impacts would not be cumulatively considerable.	
4.9 Transportati	ion, Circulation, and Parking			
Project Impacts				
Conflict with a Program, Plan, Ordinance, or Policy Addressing the Circulation System	Implementation of the proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	LS	No mitigation is required.	LS
Conflict or be Inconsistent with State CEQA Guidelines Section 15064.3, Subdivision (b)	Implementation of the proposed project would not conflict or be inconsistent with State CEQA Guidelines Section 15064.3, subdivision (b).	LS	No mitigation is required.	LS
Result in Inadequate Parking Supply	Implementation of the proposed project would not result in an inadequate parking supply.	LS	No mitigation is required.	LS
Cumulative Imp	acts			

		Significance Before	Significance After
Issue	Impact	Mitigation Mitigation Measure(s)	Mitigation
The propos	ed project's incrementa	al contribution to cumulative transportation, circulation, and parking impacts woul	d not be cumulatively

considerable.

Notes: NI = No Impact; LS = Less Than Significant; PS = Potentially Significant; SU = Significant and Unavoidable

2.7 Areas of Known Controversy/ Issues Raised by Agencies and the Public

Section 15123 of the State CEQA Guidelines requires the summary of an EIR to include areas of controversy known to the Lead Agency, including issues raised by agencies and the public. The District circulated a Notice of Preparation (NOP) to solicit agency and public comments on the scope and content of the environmental analysis to be included in the Draft EIR beginning on March 7, 2019, and ending on April 5, 2019. The Initial Study/Environmental Checklist and NOP are included as Appendix A of the Draft EIR.

Nine comment letters were received during the NOP public review period. The primary issues raised include air quality; biological resources; cultural resources; GHG emissions; hazards and hazardous materials; hydrology and water quality; noise and vibration; transportation, circulation, and parking; and utilities and service systems. A summary of all comments received is included in Table 1-2 of Chapter 1, *Introduction*, of the Draft EIR, and all NOP comment letters are included in Appendix B of the Draft EIR.

The District circulated the Draft EIR for public review beginning on July 2, 2020 and ending on August 17, 2020. A total of seven comment letters were received during the Draft EIR public review period. Comments received on the Draft EIR included concerns related to biological resources, hazards and hazardous materials, waste management, vector control, air quality, GHG emissions, and noise. The comment letters and the District's responses are provided in Chapter 5, *Comments Received and District Responses*, of the Final EIR.

3.1 Introduction

BAE Systems San Diego Ship Repair, Inc. (BAE Systems), is a ship repair company in the San Diego area, serving primarily non-nuclear Navy vessels but also commercial customers. BAE Systems currently leases 9.8 acres of land and 16.6 acres of water from the District. This lease is scheduled to expire in 2034. In addition, BAE Systems currently occupies a parcel pursuant to a now-expired 5-year Tidelands Use and Occupancy Permit (TUOP) from the District for an additional 2.0 acres of land and 4.0 acres of water.¹ As a result, BAE Systems leases approximately 11.8 acres of land area and approximately 20.6 acres of water area from the District. In addition to these leased and permitted areas, BAE Systems leases 3.5 acres of submerged land from the District. These submerged lands were originally leased from the California State Lands Commission (SLC). However, effective January 1, 2020, this area was transferred to the District's jurisdiction per Senate Bill (SB) 507, which granted and conveyed in trust to the District all right title, and interest in certain tidelands and submerged lands, as enumerated in SB 507. BAE Systems (including the TUOP parcel) pursuant to agreements with the District makes up the BAE Systems San Diego Ship Repair Yard (project site).

The project site consists of three working piers, five wet berths, and two floating drydocks, all of which are used to modernize, repair, and overhaul various marine vessels. The smaller of the two drydocks, the Pride of San Diego, has been on site since 1984. In 2017, the larger drydock, Pride of California, was commissioned to meet the growing needs of BAE Systems' customers.

BAE Systems, as the project proponent, is proposing a maintenance, repair, and replacement project for waterfront infrastructure associated with mooring and operational facilities at its San Diego Ship Repair Yard. The BAE Systems Waterfront Improvement Project (project or proposed project) includes 15 distinct project elements, all of which are discussed in detail in this chapter under Section 3.4, *Project Description*. Briefly, the proposed project includes the following.

- Replacement and realignment of the Pride of San Diego drydock access wharf and ramp, along with several associated improvements.
- Replacement and realignment of the Pier 3 wharf structure, along with other associated improvements.
- Replacement of aging or inefficient facilities, including offices, the production building, the central tool room, and restrooms.

¹ The TUOP between the District and BAE Systems expired October 31, 2019. BAE Systems is currently on a limited holdover tenancy pursuant to that expired TUOP. However, it is anticipated that the TUOP will be renewed. TUOP renewal would not authorize any new improvements or activities that could physically impact the environment. It would reaffirm BAE Systems' existing occupancy right and continue existing operations. Therefore, any TUOP renewal is considered a separate action previously analyzed under a separate CEQA document for the Pier 1 North Drydock, Associated Real Estate Agreements and Removal of Cooling Tunnels project, SCH #2014041071, and is not part of the proposed project.

- Implement mooring infrastructure improvements to ensure safety and accommodate the newer and different classes of vessels to be moored and repaired on the site.
- Upgrades to electrical and potable water utility infrastructure.

This chapter describes the project need and purpose, objectives, and necessary approvals. The project description is also included. A description of the site is provided in Chapter 2, *Executive Summary*, which includes location maps (Figures 2-1 and 2-2).

3.2 **Project Need and Purpose**

The purpose of the proposed project is to maintain and improve facilities for the berthing needs of current and future Navy assets and other customers. As part of the U.S. Navy's "Pivot West" strategy, it is anticipated that more Navy vessels will be home-ported in San Diego. As a result, BAE Systems requires the ability to flexibly locate various ships within the existing facility as well as ensure safe and efficient facility utilization for the moorage of vessels, including during extreme weather conditions.

The proposed project would replace aging structures, improve existing infrastructure, increase space utilization, and increase the efficiency of operations at the ship repair yard. Although these improvements would allow newer and different classes of vessels to be moored and repaired on the site, the proposed improvements are not expected to increase the number of vessels serviced because no new berthing space would be provided. Furthermore, the mooring of newer, larger vessels would reduce the number of other vessels that could be concurrently moored at the ship repair yard.

3.3 **Project Objectives**

To achieve the need and purpose of the proposed project, the following project objectives have been identified:

- 1. Construct and operate shipyard repair facilities that maximize the use of existing waterways, available shoreline, and existing land.
- 2. Modernize the BAE Systems San Diego Ship Repair Yard by providing improved facilities that meet the needs of the current and anticipated fleets of the military and commercial customers.
- 3. Enhance worker safety, customer security, and environmental protection programs through the integration of relevant project elements.
- 4. Invest in new shipyard infrastructure that will enhance the short- and long-term attractiveness and viability of San Diego Bay and the region to military and commercial ship operators for construction and repair, consistent with the Port Master Plan.²
- 5. Preserve jobs by maintaining the physical capacity and technical capability to support the Navy's presence as well as commercial maritime needs in San Diego.

² "Renovation and redevelopment of existing facilities will continue as industries respond to market demands and changes in the maritime industrial climate." San Diego Unified Port District, Port Master Plan (August 2017), page 79.

3.4 **Project Description**

The proposed project consists of the following 15 project elements that are designed to improve the efficiency and functionality of the existing BAE Systems San Diego Ship Repair Yard.

- 1. Pride of San Diego Drydock Dredging³ and Moorage
- 2. Pride of San Diego Drydock Wharf Replacement and Realignment
- 3. Fender System Repair and Replacement
- 4. Pier 3 South Nearshore Dredging
- 5. Pier 3 Mooring Dolphin
- 6. Pier 3 North Lunchroom Wharf Replacement and Realignment
- 7. Quay Wall Modifications
- 8. Port Security Barrier Replacement
- 9. Small Boat Mooring Float Replacement
- 10. Central Tool Room Demolition and Reconstruction
- 11. New Production Building
- 12. Administrative Office Building
- 13. Pier 1 Restroom Renovation and/or Demolition
- 14. Main Electrical Utility Service Update
- 15. Sanitary Sewer and Potable Water Utility Services

The majority of the proposed work would take place within the District's jurisdiction (i.e., Project Elements 2, 3, 4, 6, 7 and, 9–15). Project Elements 1, 5, and 8 are within the District's leasing jurisdiction and the California Coastal Commission's (CCC) permitting jurisdiction, per SB 507 and the California Coastal Act. BAE Systems will apply directly to the CCC for authorization and entitlements for Project Elements 1, 5, and 8; however, this EIR analyzes the entire proposed project, as required by CEQA. Figure 3-1 provides an overall site plan for identifying the location of each project element by number. A detailed discussion of the proposed activities under each project element is provided below.

3.4.1 Pride of San Diego Drydock Dredging and Moorage Replacement (Project Element 1)

Project Element 1 includes dredging and associated replacement of mooring dolphins⁴ to hold the Pride of San Diego drydock in place. Figure 3-2 provides photos of the existing mooring dolphins proposed to be demolished for this project element, and Figure 3-3 depicts its conceptual dredge design. Most of Project Element 1 is within the District's jurisdiction; however, the westernmost

³ *Dredging* is defined as the removal of sediments and debris from the bottom of lakes, rivers, harbors, and other water bodies.

⁴ A *mooring dolphin* is defined as an in-water structure, typically made up of a cluster of piles that extends above the water surface to provide mooring points for vessels.

mooring dolphin and a portion of the required dredging area would be within both District jurisdiction (leasing) and CCC jurisdiction (permitting).

Because of conflicts with the original 1983 dredge sump⁵ design, the current configuration requires the drydock to be moved⁶ from its mooring to the west and south in order to submerge and dock or undock a vessel each time a vessel comes in for drydock servicing. When a wide-bodied vessel is positioned adjacent to Pier 3 North, the size of the vessel prevents the drydock from being moved into its submergence location. Dredging and relocation of the mooring dolphins would allow the drydock to submerge and lift vessels in place without the need for the drydock to be moved. This would improve operational efficiencies because wide-bodied vessels could be moored at Pier 3 North concurrently with drydocked vessels while under repair at the Pride of San Diego drydock. Accordingly, this would eliminate the need to run the diesel engines of two separate vessels concurrently during docking and undocking activities as well as the need for tugboats to move the drydock. In addition, Project Element 1 proposes to dredge sediment around the Pride of San Diego ramp wharf and eastern mooring dolphin. This would remove potentially contaminated sediment that was not accessible during the remedial dredging that occurred in 2015 under Regional Water Quality Control Board (RWQCB) mandated Cleanup and Abatement Order (CAO) No. R9-2012-0024. During remedial activities, sand, including gravelly sand, was placed in areas that were not accessible. Proposed replacement of the mooring dolphins may allow access to these areas; therefore, potentially contaminated gravelly sand, sand, and sediment may be removed during dredging.

In total, Project Element 1 proposes to dredge approximately 98,800 cubic yards (cy) of material. Figure 3-4 depicts the proposed conceptual dredge design to achieve compliance with the CAO, which includes both Project Elements 1 and 6. (Figure 3-5 depicts the conceptual dredge design for Project Element 6 only.) Based on preliminary assessments conducted by the project proponent, it was conservatively estimated that 20 percent of the dredge material for Project Element 1 would contain contaminated sediment, although additional analysis indicates the estimate may be closer to 11 percent.⁷

⁵ A *sump* is defined as a pit or other type of hollow area that collects liquids.

⁶ Referred to as *translated*. *Translation* means to move the dock in a specific direction—north, south, east, or west.

⁷ Where applicable throughout this EIR, the more conservative estimate is used for CEQA analysis purposes. For example, Sections 4.1, *Air Quality and Health Risk*, and 4.3, *Greenhouse Gas Emissions and Energy*, of the Draft EIR conservatively analyzed both the high end of trucks (i.e., 20 percent upland disposal) and the high end of tug and scow trips (i.e., 89 percent ocean disposal) to quantify project emissions.



	1	PRIDE OF SAN DIEGO DRYDOCK DREDGING / MOORING
	2	PRIDE OF SAN DIEGO WHARF REPLACEMENT / REALIGNMENT
	3	FENDER SYSTEM REPAIR AND REPLACEMENT
	4	PIER 3 SOUTH NEARSHORE DREDGING
	5	PIER 3 MOORING DOLPHIN
	6	PIER 3 LUNCHROOM WHARF REPLACEMENT / REALIGNMENT
\mathbb{N}	7	QUAYWALL MODIFICATIONS AT SOUTH END OF PROPERTY
	8	PORT SECURITY BARRIER (PSB) REPLACEMENT (NAVY SECURITY REQ.)
\mathbf{N}	9	SMALL BOAT MOORING FLOAT REPLACEMENT
	10	CENTRAL TOOL ROOM REPLACEMENT / RELOCATION
	11	NEW PRODUCTION BUILDING
	12	ADMINISTRATIVE OFFICE COMPLEX
	13	PIER 1 RESTROOM (EXISTING) DEMOLITION
	14	MAIN ELECTRICAL UTILITY SERVICE
	15	SANITARY AND POTABLE WATER CAPACITY INCREASE

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Photo of existing Pride of San Diego mooring dolphins to be demolished in-way-of new Pride of San Diego mooring dolphin construction.



Existing Pride of San Diego dolphins to be demolished for new dolphin construction



Existing Pride of San Diego dolphin to be demolished for new dolphin construction



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vv\Figures\Doc\EIR\F	final design process.			-70 65		
nprc		/		Landward of US Pier Head Line	Waterward of US Pier Head Line	TOTAL
s .				Cubic Yards	Cubic Yards	Cubic Yards
tem		Design Volume (w/ 2' allow	able overdepth)	81,400	17,400	98,800
Sys		Estimated Ocean Disposal		70,900	17,400	88,300
Щ	Scale in Feet	Estimated Upland Disposal		10,500	0	10,500
0/B/		TOTAL DREDGE VOLUME				98,800
\\PDCCITRDSGIS2\Projects 4\Port of San Die	SOURCE: Upland topography from Digital Mapping Inc., dated September 2009, and supplemented by Environmental Data Solutions survey dated April 13, 2013. Pre-dredge bathymetric data is from CLE Engineering survey dated February 12, 2017 supplemented with post-sand cover survey from San Diego Shipyards North project, completed January 2016. HORIZONTAL DATUM: California State Plane, Zone 6, NAD83, U.S. Feet. VERTICAL DATUM: Mean Lower Low Water (MLLW).	LEGEND: 	Existing C Proposed	ontour Dredge Contour		Proposed Site Improvements Ramp Wharf Dredge Limits POSD Dry Dock Dredge Limits



Figure 3-3 Project Element 1 Conceptual Dredge Design BAE Waterfront Improvement Project





SOURCE: Bath performed by e fromOoctober 2016. HORIZONTAL Plane, Zone 6, 1983 (NAD83), VERTICAL DA Water (MLLW)	ymetry from surveys Trac, Inc., on various dates 2015 through February 25, DATUM: California State North American Datum of U.S. Survey Feet TUM: Mean Lower Low
	 SMU Boundary Existing Major Contour (5' Interval) Existing Minor Contour (1' Interval) Dredge Footprint (Floor) Dredge Footprint (Side Slope)
ion	Volume (CY)
nd Mooring Dolphin Area ¹	10,500
	2,000
Total Estimated Volume	12 500

Figure 3-4 Project Element 1 and Project Element 6 Conceptual CAO Dredge Areas **BAE Waterfront Improvement Project**



13 4 Pier3 BreakArea.mxd Date: 12/18/2019



Figure 3-5 Project Element 6 Pier 3 Break Area Conceptual Dredge Design BAE Waterfront Improvement Project

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Therefore, the analysis contained within the Draft EIR assumes approximately 80 to 89 percent of all dredged materials for Project Element 1 would be disposed of at an approved Ocean Dredge Material Disposal Site (i.e., U.S. Environmental Protection Agency [EPA] disposal site LA-5); the remaining 11 to 20 percent would be unsuitable for unconfined aquatic disposal, per U.S. Army Corps of Engineers (USACE) and EPA disposal criteria, and would be transported to an approved disposal facility capable of accepting contaminated sediments. It should be noted that, in the event that unconfined aquatic disposal is not suitable, only approximately 15,280 cy of the proposed 98,800 total cy of sediment would be dredged to comply with CAO No. R9-2012-0024.

The following actions are proposed as part of Project Element 1:

- Shifting the Pride of San Diego drydock west by approximately 100 feet.
- Replacing two existing 17.5- by 21-foot mooring dolphins (368 square feet for each dolphin), including removing twenty-six 18-inch-square concrete piles and 85 cy of concrete caps and installing thirty-eight 24-inch octagonal precast concrete piles with 900 total square feet of surface area.
 - Demolition of the existing mooring dolphins, concrete piles, and concrete caps would generate approximately 1,005 cy of debris.
- Relocating the drydock sump, which would require dredging to -70 feet mean lower low water (MLLW). The following dredging specifics are proposed:
 - Dredging approximately 98,800 cy⁸ of material, including 2 feet of overdepth, consisting of:
 - 81,400 cy within District (leasing) jurisdiction.
 - 17,400 cy within CCC (permitting) jurisdiction.
 - Disposing of up to approximately 19,800 cy of dredged material (i.e., up to 20 percent of the total dredged material) at an approved upland disposal site, such as the Otay Landfill.
 - Disposing of up to approximately 87,900 cy of dredged material (i.e., up to 89 percent of the total dredged material) at the Ocean Dredge Material Disposal Site (i.e., EPA's San Diego disposal site LA-5).
 - Transporting up to 36 scows⁹ (2,500 cy capacity each) to the LA-5 disposal site.

Dredging operations, including equipment maintenance activities, shift changes, barge changes, and movement about the site would be conducted 24 hours per day, 7 days a week, for 100 days.

3.4.2 Pride of San Diego Drydock Wharf Replacement and Realignment (Project Element 2)

Once drydock dredging and moorage replacement have been completed (i.e., Project Element 1), wharf and ramp modifications would be needed. Specifically, Project Element 2 would extend the existing Pride of San Diego wharf to provide a material handling area adjacent to the northeastern

 ⁸ Volume based on pre-dredge bathymetric survey data from CLE Engineering, composite surveys dated February 2017 and January 2016, and conceptual dredging volumes provided by Anchor QEA, dated July 2019.
 ⁹ A scow is a low, flat barge-like vessel used to carry material.

portion of the drydock and encompass the eastern gripper¹⁰ mooring dolphin. An apron would be installed at the end of the drydock, while a new pedestrian access ramp and support platform would be installed on the south side of the drydock to minimize the number of in-water structures required to access and support the drydock at its proposed new location. The new replacement structure would be incorporated into the existing Pride of San Diego wharf ramp. Figure 3-6 provides existing photos for this project element.

For the purposes of this analysis, complete demolition and construction activities are assumed, which would be the reasonably foreseeable worst-case scenario. The following actions are proposed as part of Project Element 2.

- Demolishing 5,540 square feet of existing wharf and twenty 18-inch piles, which would generate approximately 408 cy of debris.
- Installing 12,500 square feet of cast-in-place decking on 73 octagonal piles¹¹ and six concrete precast piles,¹² extending from the existing wharf structure to northeastern portion of the Pride of San Diego drydock. New in-water structures (fixed) associated with the new wharf would be built to an increased elevation of +12 feet MLLW.
- Installing an apron¹³ at the end of the drydock and a new pedestrian access ramp and support platform on the south side for material handling adjacent to the drydock.

3.4.3 Fender System Repair and Replacement (Project Element 3)

The existing fender¹⁴ systems are experiencing natural deterioration due to age and routine damage from decades of use. New fenders are required where shoreline features have been reconstructed.

The following actions are proposed as part of Project Element 3.

- Removing and replacing in place the 503 existing 14-inch by 89-foot steel H-pile¹⁵ fenders. Removal of the existing fenders would generate approximately 269 cy of debris.
- Installing 122 new steel H-pile fenders, for a total of 625 fenders. The new fender locations are as follows:
 - Bulkhead installation at the south side of Pier 1, resulting from remediation and fill of the former marine railways in 2004.
 - Bulkhead replacement along the shoreline south of Pier 3 to the southern property line.
 - The west-facing perimeter of the proposed new marginal wharf area associated with Pier 3 North Lunchroom Wharf Replacement and Realignment (Project Element 6).

 ¹⁰ A gripper is a mechanical feature of a mooring system, used for securing floating drydocks to a mooring dolphin.
 ¹¹ Octagonal piles are eight-sided concrete support structures.

¹² *Precast piles* are concrete piles that are formed in circular, square, rectangular, or octagonal shapes. Precast piles are manufactured in a casting yard before transport to the project site.

¹³ An *apron* is the space allotted for maneuvering a vehicle into alignment with the dock.

¹⁴ A *fender* is a piece of equipment that protects a pier, berth, jetty, or other vessel from a berthing vessel. Fenders are typically made of rubber, foam, or plastic in order to absorb energy from the berthing vessel.

¹⁵ A *steel H-pile* is an in-water support structure with a cross beam that forms an H-like shape.

In addition, fenders are occasionally damaged when struck by vessels, in which case they need to be replaced quickly in order to provide safe moorage for vessels. Therefore, for analysis purposes, it is assumed that up to 39 steel H-pile fenders per year would be replaced over the life of the existing lease (until 2034).

3.4.4 Pier 3 South Nearshore Dredging (Project Element 4)

Dredged material has entered the Pier 3 berth sump; therefore, this project element proposes to dredge approximately 15,000 cy of material. Figures 3-7a through 3-7c depict the conceptual dredge plan for Project Element 4. In addition, the Pier 3 sump requires modification for safe passage of tugboats while maneuvering large ships.

The following actions are proposed as part of Project Element 4:

- Dredging approximately 15,000 cy from the toes of the dredge sump to the limit line elevation of the new bulkhead (-17 feet MLLW). Dredging would extend to an operational depth of -35 feet MLLW plus 2 feet of overdepth dredging.
- Placing dredged material directly onto dredge scows, with no stockpiling of materials on the site; loading directly onto trucks from the scows; and disposing of materials. Dredged material is dewatered, treated, and disposed of in accordance with existing permit and landfill requirements.

Dredging operations, including equipment maintenance activities, shift changes, barge changes, and movement about the site would occur 24 hours per day, 7 days per week, for 69 days.

For Project Element 4, the extent of contamination within the sediment in this area is currently unknown. Therefore, there are two scenarios under consideration for disposal of dredged materials:

- The **50/50 Scenario** assumes that half of the total dredged material (7,500 cy) generated during Project Element 4 would be suitable for ocean disposal and half (7,500 cy) would require upland disposal. This scenario would result in approximately three scows to dispose of the material at the ocean disposal site, with each scow trip conveying 2,500 cy. The remaining half of the dredged material would be taken to upland locations using haul trucks with an estimated 15 cy capacity per truck.
- The **All-Truck Scenario** assumes that all dredged material (15,000 cy) would be disposed of at an upland location using haul trucks with an estimated 15 cy capacity per truck.

3.4.5 Pier 3 Mooring Dolphin (Project Element 5)

Installation of an additional mooring dolphin would be necessary to ensure safe vessel moorage, especially during extreme storm surge or other climatic conditions (e.g., wind and tide). The mooring dolphin would provide a fixed structure for securing the bow of large vessels and be designed consistent with existing mooring dolphins at the BAE Systems facility. The proposed new mooring dolphin would be entirely within CCC's jurisdiction. Figure 3-6 provides existing and representative photos for this project element.



Photo of existing Pride of San Diego ramp wharf to be demolished in-way-of new extended wharf structure.



Approximate location of new pier 3 mooring dolphin



Existing pier 3 mooring dolphin; proposed new dolphin would consist of same design





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Figure 3-7a Conceptual Dredge Design - Project Element 4 Dredging BAE Systems Waterfront Improvement Project

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NOTE: Drydock location and dimensions are based on file received from BAE Systems and Triton Engineers on October 21, 2016.

Figure 3-7b Cross-sections A-A' and B-B' - Project Element 4 Dredging BAE Systems Waterfront Improvement Project

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approximate, and are based on 'Bataan_LHD5_SRD_Docking_Plan_ 6859465_RevC_Multiple_Sheets.pdf

Figure 3-7c Operational Conditions Cross-section C-C' - Project Element 4 Dredging BAE Systems Waterfront Improvement Project

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The following actions are proposed as part of Project Element 5:

- Installing one 16- by 20-foot, 3-foot-thick mooring dolphin 970 feet offshore (i.e., 270 feet west of the U.S. Pierhead Line). The height of the new mooring dolphin would extend to +13 feet MLLW. The following components are proposed for the new mooring dolphin:
 - Eight 24-inch concrete octagonal piles.
 - Two 150-ton double bitts.¹⁶
- Installing 16 steel H-pile fenders, 12 cylindrical fenders, whalers,¹⁷ and chocks¹⁸ around the perimeter of the proposed mooring dolphin.

3.4.6 Pier 3 North Lunchroom Wharf Replacement and Realignment (Project Element 6)

The Pier 3 wharf is a timber structure at the northern foot of Pier 3 that is aging and in need of replacement. The timber deck, which is supported by twenty-seven 12-inch-square precast concrete piles, was originally installed in the 1950s or 1960s but underwent significant modifications in 1985. The structure is currently used by employees during lunch breaks. In addition, an open area, which is currently surrounded by structures, would be covered. As part of the replacement, dredging may remove potentially contaminated sediment that was not accessible during the remedial dredging associated with CAO No. R9-2012-0024. An estimated 2,000 cy of potentially contaminated sediment this area. Figure 3-8 provides representative photos for this project element, Figure 3-4 depicts the conceptual dredge design to achieve compliance with CAO No. R9-2012-0024 and Figure 3-5 depicts the conceptual dredge design for Project Element 6.

The following actions are proposed as part of Project Element 6:

- Demolishing the existing overwater, 1,150-square-foot restroom structure; removing 2,915 square feet of wood decking; and removing 595 square feet of metal. Removal of these existing materials would generate approximately 77 cy of debris.
- Removing twenty-seven 12-inch concrete pilings and one H-pile.
- Installing forty-eight 24-inch octagonal pre-cast concrete pilings.
- Constructing a new overwater structure consisting of 8,800 square feet of cast-in-place decking (including a berm edge and stormwater collection system) to replace the existing overwater structure that would be demolished. The height of the new decking would extend to +13 feet MLLW.
- Dredging approximately 2,000 cy of material from beneath the Pier 3 break area and disposing of it at an approved upland disposal site, such as the Otay Landfill.

¹⁶ A *double bitt* is a type of bollard with two metal protrusions, which are used to secure lines from vessels to a dock. (A *bollard* is a short, thick post on the deck of a ship, or a wharf, for securing lines from a ship.)
¹⁷ Whalers are the large wooden crossbars that support the bulkhead, which is part of the pier. (The *bulkhead*, as defined here, refers to a retaining wall along the waterfront.)

¹⁸ *Chocks* are metal fixtures that hold lines in position so that vessels can tie up to a bollard, bitt, etc.

3.4.7 Quay Wall Modifications (Project Element 7)

A rock revetment slope is affecting vessel mooring and requires reinstallation. Figure 3-8 provides existing photos for this project element. The following actions are proposed as part of Project Element 7:

- Dredging 300 cy of rock, which would be disposed of at a local recycling facility.
- Dredging 500 cy of sediment in the immediate vicinity of the submerged sheet pile structure, which would be disposed of at an approved upland disposal site, such as the Otay Landfill.
- Installing up to 50 linear feet of a submerged sheet pile structure.

3.4.8 Port Security Barrier Replacement (Project Element 8)

A Port Security Barrier (PSB) is maintained around the facility, as required by the U.S. Navy, for vessels within the BAE Systems facility. The PSB deters small craft from approaching Navy vessels while they are undergoing repair. The U.S. Navy has instituted newer, stricter requirements for the PSB system, resulting in the need to replace the existing PSB with a new design. The proposed new PSB would be partially within CCC jurisdiction. Figure 3-9 provides existing and representative photos for this project element.

The following actions are proposed as part of Project Element 8:

- Removing the existing 3,500-linear-foot floating boom and replacing it with a new 3,500-foot hard barrier. The new PSB includes the following components:
 - Ten 8- by 7.55-foot buoys secured by three anchors per buoy location.
 - 3,500 linear feet of hard barrier (PSB-T or PSB-V type) with navigational aid lights.
- Removing and disposing of the existing barrier, buoys, and anchors; disposing of 3,500 linear feet, or approximately 120 cy, of debris; and recycling 13 tons of scrap steel and 19 cy of concrete.

3.4.9 Small-Boat Mooring Float Replacement (Project Element 9)

The small-boat mooring float allows personnel and materials to be deployed for waterfront facility maintenance and inspection as well as other surveillance activities, including drills and exercises, conducted on site. In addition, as part of the enhanced site security requirements instituted by the U.S. Navy, BAE Systems is required to maintain on-water security, including security patrol vessels. Figure 3-10 provides existing photos for this project element. The following actions are proposed as part of Project Element 9:

- Removing and replacing four piles that support the float.
- Replacing the existing 320-square-foot aged timber moorage float system (160 square feet for each float) with two 200-square-foot concrete floats. The new floats would include one 45-foot-long aluminum gangway, low-voltage electrical service, and potable water.
- Installing four 18-inch-round precast concrete piles.



Pier 3 break area and outline of proposed wharf structure



Pier 4 South Quaywall, looking towards south property line



Subsurface and sloped revetment to be removed



Figure 3-8 Project Element 6: Pier 3 Lunchroom Wharf Replacement / Realignment and Project Element 7: Quaywall Modifications at South End of Property BAE Systems Waterfront Improvement Project



Existing Port Security Barrier (PSB) perimeter around facility waterfront



Representative PSB Barrier (float sections spanning waterway) Representative PSB buried conc. anchor block & mooring buoy





Existing small craft float



Concrete float concept design mockup



Location of existing tool room to be demolished and incorporated into proposed wharf structure building.



Cont of

Figure 3-10 Project Element 9: Small Boat Mooring Float Replacement and Project Element 10: Central Tool Room Replacement / Relocation BAE Systems Waterfront Improvement Project

3.4.10 Central Tool Room Demolition and Reconstruction (Project Element 10)

The existing central tool room is an aging structure at the foot of Pier 3, on the south side of the project site. The structure would be demolished, and a new tool room would be constructed on the proposed new wharf structure (as proposed as part of the Pier 3 North Lunchroom Wharf Replacement and Realignment [Project Element 6]). Figure 3-10 provides existing photos for this project element. The following actions are proposed as part of Project Element 10:

- Demolishing the existing 2,000-square-foot central tool room structure, which would generate approximately 16 cy of debris.
- Excavating approximately 150 cy of soil to a maximum depth of 2 feet for the new building foundation. The majority of the excavated soil material would be recompacted and used as the base for new asphalt.
- Constructing a three-story replacement structure that would provide an approximately 21,900square-foot work space and a 7,300-square-foot building footprint. The height of the proposed new building would extend to +50 feet MLLW.
- Replacing the existing Pier 3 restroom facilities within the new central tool room or incorporating the existing Pier 3 restrooms into the new structure.
- Providing utilities and related infrastructure (e.g., potable water, sanitary sewer service, compressed air, natural gas, electrical, computer, communications) within the new tool room.

3.4.11 New Production Building (Project Element 11)

Project Element 11 would involve demolishing the existing production building and constructing a new production building near the existing Building 6/7 (see Figure 3-1). This proposed building would increase the efficiency of material assembly. The first floor of the new structure would be used for production and equipped with an overhead bridge crane. The second and third floors would contain engineering, production support, and administration functions. Figure 3-11 provides existing photos for this project element. The following actions are proposed as part of Project Element 11:

- Demolishing the existing 17,675-square-foot production building, which would generate approximately 698 cy of debris.
- Excavating approximately 2,600 cy of soil to a maximum depth of 4 feet for the new building foundation. The majority of the excavated material would be reused as backfill around foundations or for the concrete slab under the new production building. However, it is anticipated that approximately 400 cy of excavated soil material would not be suitable for reuse and therefore would be disposed of at an approved upland disposal site.
- Constructing a new three-story production building with a 48,379-square-foot work space and a 16,475-square-foot footprint, with a height of up to 50 feet.
- Installing an overhead bridge crane within the first floor of the new production building.
3.4.12 Administrative Office Building (Project Element 12)

The existing offices are trailers that BAE Systems rents/leases for customer use in support of ship repair contracts performed on the site. These facilities provide space for the government contracts, quality assurance, and program management personnel who have been assigned to these contracts. This project element includes construction of permanent administrative office spaces. The first floor would contain production spaces, a tool room, and restroom. The second and third floors would contain office space and a break room. The new administrative office building would accommodate existing personnel, with the intention of reducing/eliminating the need for double and triple occupancies, which currently occur at several work stations in the production spaces throughout the project site. Figure 3-12 provides existing photos for this project element.

The following actions are proposed as part of Project Element 12:

- Disassembling and removing four trailers, totaling approximately 8,016 square feet, which would generate approximately 150 cy of debris.
- Demolishing approximately 8,600 square feet of asphalt pavement and excavating for water and sewer service piping, footings/foundations, and general recompaction activities. It is anticipated that approximately 650 cy of soil material would be excavated to a maximum depth of 5 feet and a maximum of 200 cy of material would be disposed of at an approved upland disposal site.
- Constructing a new three-story administrative office building with approximately 46,000 square feet of work space, a building footprint of 16,000 square feet, and a height of up to 55 feet.

3.4.13 Pier 1 Restroom Renovation and/or Demolition (Project Element 13)

The existing 506-square-foot restroom facility requires reconfiguration to increase capacity and improve functionality for employees, customers, and contractors. The restrooms would be retrofitted with more water efficient fixtures, LED lighting, and other features to increase utility and efficiency.

As an alternative, upon completion of Project Element 12 (Administrative Office Building), which includes a restroom facility, the Pier 1 restroom may be demolished if it is determined that it is no longer needed. The demolition would generate approximately 51 cy of debris, and excavation would be limited to removal of the buried piping to the Pier 1 lift station. It is anticipated that approximately 40 cy of soil material would be excavated to a maximum depth of 5 feet, and 10 cy of material would be disposed of at an approved upland disposal site. Figure 3-12 provides existing photos for this project element.



Location of existing bldg 6 & 7 to be demolished in-way-of new production building in similar footprint



Bldg 6/7 (east) to be demolished in-way-of new prod. bldg.



Bldg 6/7 (west) to be demolished in-way-of new prod. bldg.





Existing modular offices footprint of new administrative office complex



Modular offices to be removed in-way-of administrative office construction



Existing pier 1 restroom to be demolished and incorporated into new admin complex



Figure 3-12 Project Element 12: Administrative Office Complex and Project Element 13: Pier 1 Restroom (Existing) Demolition BAE Systems Waterfront Improvement Project

3.4.14 Main Electric Utility Service Update (Project Element 14)

Project Element 14 would reconfigure the electrical utility distribution system in Building 13. This would involve relocation of the San Diego Gas & Electric main in Building 13 to Building 65, alongside East Belt Street, adjacent to the shipyard's existing four-way switch. Relocation of this electrical main would increase overall site safety by allowing San Diego Gas & Electric technicians access to critical electrical components outside the secure property perimeter. In addition, this project element would also provide additional space in the Building 13 electrical room, allowing BAE Systems to reconfigure and/or modernize the electrical equipment as needed. The following actions are proposed as part of Project Element 14:

- Replacing and upgrading electrical distribution equipment to ensure reliability and protect site infrastructure.
- Relocating the existing San Diego Gas & Electric main (i.e., meter) from Building 13 to Building 65. Existing electrical conduits within the project site would be reused to pull electrical cables to the relocated main in Building 65.

3.4.15 Sanitary Sewer and Potable Water Utility Services (Project Element 15)

The existing sanitary sewer and potable water service feeds have not been modified since the original installation in 1983. The hotel service requirements of current naval and commercial vessels necessitate improvements to sanitary sewer and potable water services. If implemented, this project element would include the replacement of existing sanitary and potable water feeds currently connected to existing utility services, which would require minor trenching. At this time, the exact locations and details of the specific sanitary and potable water feeds that would be replaced is unknown. Therefore, it is assumed that these improvements could occur throughout the project site.

3.5 **Project Construction**

3.5.1 Schedule

Construction of the various project elements is anticipated to begin in June 2021, with Project Element 3 (Fender Systems Repair and Replacement) and Project Element 4 (Pier 3 South Nearshore Dredging), and last through March 2026. Construction of each project element would not be performed in the order in which they are numbered in Figure 3-1. As shown in Table 3-1, construction of the various project elements would primarily occur sequentially, with little to no overlap between elements; however, construction of some elements may occur concurrently. All construction activities would occur between 7:00 a.m. and 7:00 p.m. except for dredging activities, which would potentially occur 24 hours a day, 7 days a week for their duration. Table 3-1 lists the project elements in chronological order and provides the anticipated timing, duration, and construction crew size for each project element. Note that the anticipated construction schedule in Table 3-1 is approximate and is provided for analysis purposes, and the actual start and end dates may vary.

Table 3-1. Proposed Construction Schedule

			Approximate	6	
#	Project Element	Anticipated Schedule	Duration (months)	Crew Size	Truck Trips
31	Fender System Repair and Replacement (Fender Repair and Replacement)	June 2021– July 2021	0.75	6	60
9	Small-Boat Mooring Float Replacement	July 2021– August 2021	1.00	5	7
2	Pride of San Diego Drydock Wharf Replacement and Realignment	September 2021– December 2021	4.00	13	256
1	Pride of San Diego Drydock Dredging and Moorage	September 2021– December 2021	3.25	12	1,380
7	Quay Wall Modifications	January 2022– February 2022	1.00	10	10
31	Fender System Repair and Replacement (Fender System New Construction)	February 2022– March 2022	1.50	6	60
8	Port Security Barrier Replacement	May 2022– July 2022	2.00	6	75
31	Fender System Repair and Replacement (Fender System Maintenance and Replacement)	July 2022– August 2022	1.50	6	60
6	Pier 3 Lunchroom Wharf Replacement and Realignment	September 2022– December 2022	3.50	7	289
14	Electric Utility Service Update	February 2023– May 2023	3.50	5	5
15	Sanitary Sewer and Potable Water Utility Services	June 2023– August 2023	3.00	3	5
4	Pier 3 South Nearshore Dredging All Truck Scenario	September 2023– November 2023	2.25	10	1,000
4	Pier 3 South Nearshore Dredging 50/50 Scenario	September 2023– November 2023	2.25	10	500
5	Pier 3 Mooring Dolphin	November 2023– December 2023	1.50	5	24
11	New Production Building	January 2024– October 2024	9.25	16	258
12	Administrative Office Building	November 2024– August 2025	9.50	16	213
13	Pier 1 Restroom Renovation and/or Demolition	June 2025– July 2025	1.00	10	25
10	Central Tool Room Demolition and Reconstruction	September 2025– March 2026	7.00	13	22

Note: The project construction schedule has been structured to minimize in-water work during the California least tern nesting/foraging season, where feasible.

¹ This project element would occur over three separate subphases: fender system repair and replacement, new fender installation, and fender system maintenance and replacement.

3.5.2 Equipment

In-water construction activities require specific types of construction equipment, including a floating crane, used for driving concrete piles; deck barges for delivering or storing materials; and tugboats for moving equipment, the drydock, and vessels. Landside construction activities would require use of an 80-ton land-based mobile crane, trucks for the delivery of construction materials, forklifts for support, a drilling rig, an impact hammer, and a vibratory hammer. Trucks for pouring concrete could also be required. Generally, it is anticipated that the project would require the use of rebar, structural steel, concrete, electrical and mechanical systems, tools, and construction equipment.

The types of equipment listed in Table 3-2 would be required during the various stages of construction.

Project Elements	Construction Stage	Equipment ¹
1, 4, 6, and 7	Dredging	 A dredge crane on a barge (for Project Elements 1 and 4) Scow/barge with an ocean-going tugboat (for Project Elements 1 and 4) Dump trucks Runoff control features and containment structures Pusher tugboat and survey vessel Tractor/loader/backhoe
1-3, 6, 10-13	Demolition of Existing Structures	 Crane Forklift Miscellaneous construction equipment, including, but not limited to, pump trucks, asphalt pavers, and compactors Other material handling equipment, including, but not limited to, cranes, forklifts, front-end loaders, excavators, and Bobcat skid steers Welders Generator Tractor/loader/backhoe Tugboat
1–12, 14, and 15	Construction	 Crane Forklifts Miscellaneous construction equipment, including, but not limited to, pump trucks, asphalt pavers, and compactors Other material handling equipment, including, but not limited to, cranes, forklifts, front-end loaders, excavators, and Bobcat skid steers Welders Generators

Table 3-2. Anticipated Construction Equipment

¹This is a comprehensive list of equipment that would be used for the project element; however, not every piece of equipment would be required for each element.

3.5.3 Demolition and Disposal

As shown in Table 3-3, eight of the project elements require demolition of existing structures and disposal of the subsequent debris. The construction waste generated from this demolition would be transported from the site and disposed of at an approved landfill. An *approved landfill* as discussed in this EIR refers to landfills and disposal sites permitted by the California Department of Resources Recycling and Recovery, regulated by Title 27, California Code of Regulations. Construction waste would be recycled in accordance with the City of San Diego Construction and Demolition Debris Ordinance. Similar to disposal of construction waste, contaminated dredged sediment generated by the proposed project would be designated for upland disposal and transported to an approved landfill. Table 3-3 delineates the amount of demolition material that would be generated by the eight project elements that require demolition.

Projec	t Element	Weight (tons)	Volume ¹ (cubic yards)
1	Pride of San Diego Drydock Dredging and Moorage Replacement	2,032	1,005
2	Pride of San Diego Drydock Wharf Replacement and Realignment	884	408
3	Fender System Repair and Replacement	1,352	269
6	Pier 3 North Lunchroom Wharf Replacement and Realignment	125	77
10	Central Tool Room Demolition and Reconstruction	101	16
11	New Production Building	838	698
12	Administrative Office Building	291	150
13	Pier 1 Restroom Renovation and/or Demolition	6	51
	Total	5,629	2,674

Table 3-3. Landside Demolition Disposal

¹ Scrap steel generated during demolition and construction would be handled through the BAE Systems facility scrap recycling program and, therefore, is not accounted for in the volume of demolition disposal.

Up to approximately 15,000 cy of dredged materials from the Pier 3 South Nearshore Dredging (Project Element 4) would be disposed of at an approved upland landfill, such as the Otay Landfill and/or Sycamore Landfill.¹⁹ The dredged materials would be placed in dredge scows; no stockpiling on the site is proposed. Dredged material is dewatered, treated, and disposed of in accordance with existing permit and landfill requirements.

Additionally, approximately 2,000 cy of material would be dredged beneath the Pier 3 break area as part of the Pier 3 North Lunchroom Wharf Replacement and Realignment (Project Element 6). The Quay Wall Modifications (Project Element 7) would also include dredging of 300 cy of rock, which would be disposed of at a local recycling facility, as well as 500 cy of sediment. The dredged sediment from both of these project elements would be disposed of at an approved upland disposal site.

¹⁹ As discussed under Section 3.4.4 above, the extent of unsuitable materials dredged under Project Element 4 is currently unknown. Therefore, there are two scenarios under consideration for disposal of dredged materials: the 50/50 Scenario and All Truck Scenario. The 50/50 Scenario assumes that half of the total dredged material (7,500 cy) generated would be suitable for ocean disposal and half (7,500 cy) would require disposal at an approved landfill.

Moreover, approximately 98,800 cy of material would be dredged as part of the Pride of San Diego Drydock Dredging and Moorage Replacement (Project Element 1). Dredged materials from this project element are planned for ocean disposal at the LA-5 disposal site if suitable for unconfined aquatic ocean disposal. To determine the suitability of the dredged material for unconfined aquatic ocean disposal, BAE Systems would conduct a dredged material suitability study in consultation with the USACE and EPA as part of the Ocean Dumping Permit process, under Section 103 of the Marine Protection, Research and Sanctuaries Act. Any dredged material that is unsuitable for ocean disposal would be disposed of at an approved upland landfill (see discussion under Section 3.4.1).

As discussed in Section 3.4.1, in the event that unconfined aquatic disposal is not suitable, only approximately 15,280 cy of the proposed 98,800 total cy of sediment would be dredged to comply with CAO No. R9-2012-0024.

3.5.4 Construction Worker Parking

Construction equipment laydown and parking would be provided onsite adjacent to the construction zones for each project element. In the event of excess parking demand, BAE Systems has an existing agreement with the nearby Hilton San Diego Bayfront for additional overflow parking and a shuttle service to transport workers to the project site. All construction workers who cannot be accommodated onsite and/or would need to park offsite would be required to park at the Hilton San Diego Bayfront, and all construction personnel would receive parking passes for the duration of the construction period for that project element(s). Once parked at the Hilton San Diego Bayfront, construction personnel would be required to use vanpools to and from the project site.

3.5.5 Best Management Practices

3.5.5.1 Water Quality

Construction staging activities would occur within the project site. The proposed project is anticipated to include pavement resurfacing, grading, or soil disturbance greater than 100 square feet but less than 1 acre. In addition, the proposed project would include redevelopment of 5,000 square feet of impervious surfaces on an existing site with 10,000 square feet of impervious surfaces. Therefore, the proposed project is categorized as a Priority Development Project and subject to permanent best management practices (BMPs), per the District's BMP Design Manual and as required by the Municipal Stormwater Permit. A Stormwater Quality Management Plan for Priority Development Projects that identifies and supports the use of permanent structural BMPs, as appropriate, is also required. A Construction BMP Plan would also be developed as part of the proposed project, outlining the specific BMPs that would be implemented during construction. The Construction BMP Plan would be approved by the District prior to commencement of construction activities. Components of the plan include BMPs to eliminate or reduce pollutants in stormwater runoff and non-stormwater discharges from the project site during construction. The plan includes the following types of construction BMPs: erosion management, material pollution control, sediment control, soil stabilization, tracking control, wind erosion control, waste management, and spill prevention and control.

The BAE Systems San Diego Ship Repair Yard operates and maintains a Stormwater Diversion System (SWDS) to eliminate or reduce stormwater discharges to surrounding receiving waters (i.e., San Diego Bay). The relevant proposed project elements would incorporate existing BMPs, including the SWDS, or modify/develop project-specific BMPs, as appropriate. The SWDS consists of 36 catch basins and associated piping as well as secondary containment. The perimeter of the site is bermed, including the piers, overwater structures, and drydocks. The system is designed to capture the first inch of stormwater that falls on the facility, which is 100 percent impervious.

Collected stormwater is held in 11 tank systems (DS1 through DS11) and managed in accordance with the BAE Systems Industrial User Discharge Permit, issued by the City of San Diego Industrial Wastewater Control Program. Once it has been determined that the stormwater meets Industrial User Discharge Permit parameters, it is discharged into the onsite sewer. Additional system capacity would not be required.

Standard operating procedures (SOPs) and BMPs during in-water construction activities will be implemented. Practices and procedures may include the District's *Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District* as may be augmented by the RWQCB during the Clean Water Act Section 401 Water Quality Certification process and will adhere to construction parameters established in the CAO R9-2012-0024. These BMPs and SOPs are further discussed in Section 4.4, *Hazards and Hazardous Materials*, and Section 4.5, *Hydrology and Water Quality*, of the Draft EIR. The BMPs and SOPs for pile installation or removal techniques may be modified dependent on technique employed (i.e., use of an impact hammer, and/or jetting, and/or spudding), which itself is dependent on conditions encountered.

3.5.6 Project Operation

Several of the project elements are infrastructure maintenance and modernization improvements and would not change existing operations at the project site. However, the dredging and mooring improvements under Project Element 1 (Pride of San Diego Drydock Dredging and Moorage Replacement), as well as Project Element 4 (Pier 3 South Nearshore Dredging) and Project Element 5 (Pier 3 Mooring Dolphin), would allow BAE Systems to improve operational efficiency and service newer and larger classes of vessels compared to existing conditions. Each of these operational changes are described in further detail below.

As discussed further in Section 3.4.1, the current configuration of the Pride of San Diego Drydock and sump requires the drydock to be moved from its mooring to the west and south in order to submerge and dock or undock a vessel each time a vessel comes in for drydock servicing. Implementation of Project Element 1 would improve operational efficiencies by allowing the drydock to submerge and lift vessels in place without the need for the drydock to be moved, thereby reducing the amount of time and effort needed to service vessels at drydock. This, in turn, would allow wide-bodied vessels to be concurrently moored at Pier 3 North, eliminating the need to run the diesel engines of two separate vessels concurrently during docking and undocking activities as well as the need for tugboats to move the drydock.

The largest naval vessels that can currently berth at Pier 3 are Amphibious Transport Dock (LPD-17) vessels, which are 684 feet in length. Pier 3 is not designed for the wind, tide, and mooring loads, as well as overall length, to accommodate larger vessels, such as an Amphibious Assault Ship (LHD/LHA), which is 844 feet in length and has a 106-foot beam. The proposed improvements at Pier 3 (Project Elements 4 and 5) would include approximately 15,000 cy of nearshore dredging and the installation of an additional mooring dolphin. With the proposed improvements, the facility would be able to moor the larger Amphibious Assault Ships, as well as larger commercial ships, at the Pier 3 South berth; however, no change in the mooring capacity would occur at the Pier 3 North berth as the existing shoreline infrastructure creates an inadequate pier length for supporting larger vessels.

Because of the changes to mooring capacity at Pier 3 South, the number of vessel crew and laborers onsite could also change, depending on the specific ship mix at the site. For example, commercial vessels do not generally carry a large crew, while large naval vessels occasionally do. Crew size may also be dependent on the length of the repair contract and/or the type of work being done on the vessel. Table 3-4 provides the dimensions and crew sizes for vessels that are currently serviced or could be serviced in the future at the site.

Ship Class ^{1,2}	Length (feet)	Width (feet)	Draft (feet)	Crew Size Range ⁴
Cruisers (CG)	567	55	34	272-340
Destroyers (DDG)	505	66	31	278-348
Dock Landing Ships (LSD-49)	610	84	21	318-397
Amphibious Transport Docks (LPD-17)	684	105	23	266-333
Littoral Combat Ships (LCS)	418	104	14	35-43
General-Purpose Amphibious Assault Ship (LHA)	844	106	26	847-1,059
Multi-Purpose Amphibious Assault Ship (LHD)	843	104	27	966-1,208
Dry Cargo/Ammunition Ships (T-AKE) ³	689	106	30	172
Fleet Replenishment Oilers (T-AO) ³	755	107	35	139
Expeditionary Fast Transport (T-EPF) ³	338	94	13	22

Table 3-4. Vessel Dimensions and Crew Size Ranges

¹ All vessel classes, except littoral combat ships (LCS), use an existing mooring dolphin that is approximately 150 feet past the end of the pier (i.e., west of the U.S. Pierhead Line), which is approximately 850 feet from shore.

² Types of vessels that are currently serviced at the site include CG, DDG, LSD-49, LPD-17, LCS, T-AKE, T-AO, and T-EPF. ³ Military Sealift Command (MSC)/Commercial.

⁴ Workforce of Navy vessels typically reduced when coming into berth by approximately 20 percent while under repair. Vessels depicted with varying crew sizes reflect the range between reduced and full crew sizes.

The proposed improvements at Pier 3 South (Project Elements 4 and 5) would change the number and types of vessels that could be moored at the site when a large ship is moored on the south side of the pier. The specific ship mix that the facility could support is dependent on the size of the vessel moored and its effects on adjacent berths. Because of the increased width of the larger vessels (Navy or commercial) that could be moored at Pier 3 South, the mooring of vessels at Pier 4 North would be eliminated as there would no longer be enough width between Pier 3 South and Pier 4 North to accommodate both. However, the proposed improvements at Pier 3 South would not preclude two smaller ships from being concurrently serviced at Pier 3 South and Pier 4 North, consistent with existing operations at the site.

Figure 3-13 depicts one potential berthing configuration, based on changes in ship mix that could occur with the proposed project (Scenario 2 in Table 3-5). However, mooring of vessels at Pier 4 North could still occur when cruisers (CG) (567 feet long/55 feet wide) or destroyers (DDG) (505 feet long/66 feet wide) are moored at Pier 3 South (current state). In addition, when a larger Navy ship is moored at Pier 3 South, the attendant berthing barge would need to moor at either Pier 3 North or Pier 4 South. As a result, the potential berthing capacity of the site would be reduced by two vessels. Table 3-5 compares the three potential berthing scenarios and identifies which vessels can moor at Pier 4 South when an LHD is moored at Pier 3 South following project implementation.





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			Existing	Vessel	Crew ar	nd Labor Siz	e		Propos	ed Vesse	el Crew a	nd Labor Siz	e	
Scenario						Subtotal	Total					Subtotal	Total	Delta ³
	Pier ¹	3S	3N	4S	4N			3S	3N	4S	4N			
1	Ship Type ²	CG	DDG	DDG	CG		2.216	LHD	None	DDG	None		1,844	272
1	Crew	272	278	278	272	1,100	2,216	966	0	278	0	1,244		-372
	Labor	279	279	279	279	1,116		321	0	279	0	600		
	Pier ¹	35	3N	4S	4N			35	3N	4S	4N			
2	Ship Type ²	LSD	LPD	DDG	CG		1074	LHD	None	CG	None		1 0 2 0	126
2	Crew	318	266	278	272	1,134	1,974	966	0	272	0	1,238	1,030	-130
	Labor	141	141	279	279	840		321	0	279	0	600		
	Pier ¹	3S	3N	4S	4N			3S	3N	4S	4N			
2	Ship Type ²	LSD	DDG	LCS	CG		1 572	LHD	None	LCS	None		1 4 4 77	175
3	Crew	318	278	35	272	903	1,572	966	0	35	0	1,001	1,447	-125
	Labor	141	124	125	279	669		321	0	125	0	446		

Table 3-5. Vessel Crew and Labor Co	nparison Before and After Project	ct (LHD Berthed at Pier 3 South)

¹3S = Pier 3 South; 3N = Pier 3 North; 4S = Pier 4 South; 4N = Pier 4 North.

² CG = Cruisers; DDG = Destroyers; LSD = Dock Landing Ships; LPD = Amphibious Transport Docks; LHD = Amphibious Assault Ship; LCS = Littoral Combat Ships.

³ Delta is the overall change in crew and labor size between existing and proposed project conditions for each scenario.

Another difference between existing and proposed conditions is the number of ship repair days per year. Under proposed conditions, when a larger ship is berthed at Pier 3 South, only the south side of Pier 3 would be used instead of both sides (north and south), as under current conditions, because the attendant berthing barge would be required to moor at either Pier 3 North or Pier 4 South. This would potentially limit the ability of vessels to be moored and serviced at Pier 3 North under these circumstances. However, this would occur only when an LHA/LHD is berthed at Pier 3 South. This would decrease overall operational efficiency (occupancy) at Pier 3 and therefore result in fewer days per year when Pier 3 would be active with ship maintenance and repair. The addition of the mooring dolphin at Pier 3 would support the berthing of an LHA/LHD and would not increase capacity for other classes of vessels or work at the site. With the limitations presented by the current Pier 3, such as ability to moor larger/longer vessels, BAE Systems is not able to use this pier for larger/longer ships.

Table 3-6 identifies the anticipated change in the annual average number and duration of ships moored and/or serviced at the BAE Systems facility. As shown in Table 3-6, there would be no change between the existing and projected number of vessels serviced or in the number of days spent in the drydock. However, there would be a change in the number of vessels serviced at berth (i.e., at Piers 3 and 4). Specifically, there would be three fewer CG/DDG vessels annually under the proposed condition than under the existing condition (i.e., five vessels vs. two, respectively). This would be offset by the new capability to service LHA/LHD vessels, which would add one such vessel for approximately 220 days. Overall, the average number of days vessels are in service at berth under the proposed project condition would be nearly identical to the existing condition (i.e., 156 vs. 157, respectively).

		Dryd	ocked		Berthed				
	Existing ¹		Proposed		Existing ¹		Proposed		
Ship		Duration		Duration		Duration		Duration	
Class	Number	(Days)	Number	(Days)	Number	(Days)	Number	(Days)	
CG/DDG	2	153	2	153	5	168	2	168	
LPD/LSD	1	278	1	278	2	194	1	194	
LCS	1	124	1	124	1	30	1	30	
LHA/LHD	0	0	0	0	0	0	1	220	
Total ²	4	177	4	177	8	157	5	156	

Table 3-6. Projected Changes in Average Number and Duration of Vessels Moored/Serviced (Annual)

¹ Existing data for 2015 to 2018 (2018 actuals through August and projections for September to December 2018).

² The duration totals represent the average duration of each vessel moored/serviced at the site annually.

Vessels calling on the BAE Systems facility generally require "ship assist" tugboat services to move them in and out of the shipyard. Naval vessels would come to the BAE Systems San Diego Ship Repair Yard from either Naval Base San Diego (most common) or a commercial shipyard (least common). It should be noted that LHD/LHA vessels would not arrive from sea or depart to sea immediately prior to arrival/departure at the BAE Systems San Diego Ship Repair Yard. Rather, it is anticipated that this class of vessel would transit between BAE Systems and Naval Base San Diego on all occasions. Tugs are also required when transitioning a ship to or from a BAE Systems pier or into or out of drydock. Overall, tugboat activity would decrease on an annual basis compared to existing conditions due to the reduced number of vessels that would be serviced annually, as well as the operational efficiencies gained at the Pride of San Diego Drydock, which would no longer require the drydock to be moved in order to submerge and dock or undock a vessel. A detailed discussion of the changes in tug activity resulting from the proposed project is provided in Section 4.1, *Air Quality and Health Risk*, of the Draft EIR. In addition, BAE Systems provides temporary portable diesel engines on the ships to provide minimal power for lighting and other systems during transit in and out of the facility. Furthermore, portable fire pumps are usually provided for fire protection during the movement of vessels in and out of the shipyard.

3.6 Project Review and Approvals

The District is the lead agency under CEQA and responsible for permitting and carrying out the proposed project. In addition, several other federal, state, and local permits and approvals will be required for the proposed project. The permits and approvals listed below may be required to implement the proposed project.

3.6.1 Federal Agencies

U.S. Army Corps of Engineers

- Authorize individual/nationwide Section 404 Permit (Clean Water Act [CWA]; 33 U.S. Code [USC] Section 1341)
- Authorize Section 10, Rivers and Harbors Act Permit
- Enforce Marine Protection, Research, and Sanctuaries Act of 1972, Section 103
- Enforce 40 Code of Regulations, Part 227, Criteria for the Evaluation of Permit Applications for Ocean Dumping Materials

U.S. Environmental Protection Agency

• Authorize Ocean Dumping Permit

U.S. Coast Guard

• Obtain concurrence with Ocean Dumping Permit (EPA)

National Marine Fisheries Service and U.S. Fish and Wildlife Service

• Authorize Section 401 Certification (CWA, 33 USC Section 1341, if the project requires a USACE 404 Permit) and Water Discharge Requirements for dredging

3.6.2 State Agencies

State Water Resources Control Board, Regional Water Quality Control Board

• Authorize Section 401 Certification (CWA, 33 USC Section 1341, if the project requires a USACE 404 Permit) and Water Discharge Requirements for dredging

California Coastal Commission

• Authorize a non-appealable Coastal Development Permit for activities outside District's permitting jurisdiction for Project Elements 1, 5, and 8

California Department of Fish and Wildlife

• Obtain concurrence with the Ocean Dumping Permit (EPA)

3.6.3 Local Agencies

San Diego Unified Port District

- Certification of the EIR
- Adoption of the Mitigation Monitoring and Reporting Program
- Adoption of the Findings of Fact
- Adoption of the Statement of Overriding Considerations, if applicable
- Authorization for issuance of a non-appealable Coastal Development Permit

City of San Diego

• Issuance of ministerial permits (e.g., grading, building, electrical)

4.1 Introduction

This chapter reflects the modifications to the Draft EIR that may have resulted from comments received during the 45-day public review of the Draft EIR or that were required for purposes of clarification. These modifications do not alter the conclusions of the environmental analysis, nor do they constitute significant new information. The modifications are provided by chapter and indicated with the page number from the Draft EIR. This chapter is intended to be used in conjunction with the analysis contained within the Draft EIR.

Additional text is shown as <u>underlined</u>, and deleted text is shown in strikethrough.

Volumes 2 and 3 of this Final EIR include the Draft EIR and appendices, respectively.

4.2 EIR Chapter/Section Changes

4.2.1 Changes to *Executive Summary*

Pages ES-24 through ES-61

Table ES-1. Project Impacts and Mitigation Measures

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
4.2 Biological Res	ources			
Project Impacts				
Substantial Adverse Effect on any Candidate, Sensitive, or Special-Status Species in Local or Regional Plans, Policies or Regulations	Impact-BIO-2: Potential Disturbance or Destruction of Nests Protected by the Migratory Bird Treaty Act and California Fish and Game Code. Demolition of structures and noise from construction activity could impede the use of bird nesting sites during the nesting season (February 15 through August 34September 30). The destruction of an occupied nest or disturbance to nesting activity would be considered a significant impact in violation of the	PS	 MM-BIO-2: Avoid Nesting Season for Birds or Conduct Preconstruction Nesting Surveys. To ensure compliance with the MBTA and similar provisions under Sections 3503 and 3503.5 of the California Fish and Game Code, the project proponent shall conduct all construction activities between SeptemberOctober 1 and February 14 (i.e., outside the nesting season) to the extent feasible. If construction activities are scheduled between February 15 and August 31September 30, the project proponent shall implement the following during construction: The project proponent shall retain a qualified biologist (with knowledge of the species to be 	LS
	MBTA or California Fish and Game Code. Therefore, this impact would be potentially significant.		surveyed) who shall conduct a focused nesting bird survey within potential nesting habitat prior to the start of any construction activities. The survey shall be submitted to the District for review and approval of the survey and the buffer area, defined below, if any, prior to the commencement of construction on the project site.	

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
			 The nesting bird survey area shall include the entire limits of disturbance plus a 500-foot buffer, to ensure indirect impacts would be avoided. The nesting surveys shall be conducted within 1 week prior to initiation of construction activities and shall consist of a thorough inspection of the project area by a qualified ornithologist(s). The survey shall occur between sunrise and 12:00 p.m., when birds are most active. If no active nests are detected during these surveys, only a brief letter report documenting the results shall be prepared and provided to the District. If there is a delay of more than 7 days between when the nesting bird survey is performed and construction activities begin, the qualified biologist shall resurvey to confirm that no new nests have been established. If the survey confirms nesting within 500 feet of construction activities, a no-disturbance buffer shall be established around each nest site to avoid disturbance or destruction of the nest until after the nesting season or a qualified ornithologist determines that the nest is no longer active. The size and constraints shall be determined by the qualified biologist at the time of discovery, but shall not be greater than 500 feet. of the no-disturbance buffer 	
	Impact-BIO-5: Potential Water	PS	MM-BIO-5: Implement Eelgrass Protection Measures	LS
	Quality Impairment or		and CEMP Compliance. Prior to commencing in-water	
	Construction-Related Impacts on		construction activities for Project Elements 1 through	
	Eelgrass. Impacts on <u>regrowth</u>		<u>97 (Quay Wall Modifications)</u> , the project proponent	
	eelgrass within the project		shall implement the following measures to ensure	
	boundaries were previously mitigated		protection of eelgrass beds located immediately south of	
	offsite, and so project-related impacts		the proposed Quay Wall Modifications.	
	on <u>regrowth</u> eelgrass within the		<u>Adhere to the Clean Water Act Section 404</u>	
	project boundaries are less than		permitting process and ensure California Eelgrass	
	significant. However, there are <u>new</u>			

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	growth eelgrass beds within the project site that extend beyond the spatial distribution of the eelgrass that previously removed and mitigated for offsiteimmediately adjacent to the proposed Quay Wall Modifications (Project Element 7) at the south end of the property. Eelgrass beyond the BAE Systems leaseholdthat was not part of the prior mitigation and could be indirectly impacted through increases in turbidity associated with bottom disturbance during <u>in-water</u> construction activities for Project Elements 1 through 9dredging of riprap and sediment or during driving of sheet pile. Suspended sediments cause turbidity that reduces light penetration through the water. When suspended sediment resettle, they can settle directly on eelgrass. Both of these mechanisms reduce the plant's ability to photosynthesize and therefore can lead to reductions in bed density and cover. Moreover, if contractors anchor, spud, or stage vessels over the <u>new growth</u> eelgrass beds-adjacent to the project boundaries, impacts can occur through direct contact or shading.		 Mitigation Policy compliance through the Section 404 permit and coordination with the National Marine Fisheries Service. Perform a preconstruction eelgrass survey in accordance with the California Eelgrass Mitigation Policy. Temporarily install a silt curtain to contain turbidity during all in-water construction activities for Project Elements 1 through 9dredging of rock, dredging of sediment, and installation of sheet pile during quay wall modifications. Provide results of the preconstruction eelgrass survey during a contractor education meeting and instruct the contractor not to contact the bottom or stage vessels over eelgrass vegetated areas and instruct that the use of a silt curtain is necessary during all in-water construction activities for Project Elements 1 through 9quay wall modifications. Provide results of the preconstruction activities for Project Elements 1 through 9quay wall modifications is necessary during all in-water construction activities for Project Elements 1 through 9quay wall modifications. Perform a post-construction eelgrass Survey in accordance with the California Eelgrass Mitigation Policy to validate protection of adjacent eelgrass beds following construction. In the event that unforeseen impacts to eelgrass occur, those impacts would be mitigated by increasing the amount of restoration or withdrawal of eelgrass mitigation bank credits as specified under MM-BIO-4, subsection 2.B, or as may be otherwise required by applicable regulatory agencies to ensure CEMP compliance, and utilizing the methods and standards as may be required by the regulatory agencies 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.3 Greenhouse G	as Emissions and Energy			
Project Impacts				
Consistency with Plans, Policies, and Regulatory Programs	Impact-GHG-1: Inconsistency with District Climate Action Plan and Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs. Project construction and operations would partially comply with plans, policies, and regulatory programs outlined in applicable District CAP measures and applicable state reduction goals and plans, policies, or regulations (AB 32 Scoping Plan Measures for 2020, State Regulatory Programs Post-2020, Policies from the 2017 Scoping Plan and Other Applicable Statewide Measures)for the purpose of reducing the emissions of GHGs. Therefore, prior to mitigation, the impact related to consistency with relevant plans, policies, and programs would be potentially significant.	PS	 MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures. As a condition of all discretionary actions and/or Coastal Development Permits, the project proponent shall be required to implement the following measures to be consistent with the Climate Action Plan: A. Reduce indoor water consumption to 20 percent lower than baseline buildings (defined by Leadership in Energy and Environmental Design [LEED] as indoor water use after meeting Energy Policy Act of 1992 fixture performance requirements) through use of low-flow fixtures in all administrative and common-area bathrooms. B. Comply with AB 939 AB 341, the City of San Diego Construction and Demolition Debris Deposit Ordinance, and the City of San Diego Recycling Ordinance. This shall be mandatory and include recycling at least 50 percent of solid waste; compliance with the City of San Diego Construction and Demolition Debris Deposit Ordinance shall be mandatory and include implementing a recycling program to support the statewide goal of diverting 75 percent of solid waste from landfills by 2020 in accordance with AB 341, recycling at least 65 percent of all construction and demolition debris. This measure shall be applied during construction and operation of the proposed project. C. Use only fluorescent lights, light-emitting diodes (LEDs), compact fluorescent lights (CFLs), or the most energy-efficient lighting that meets required lighting standards and is commercially available. This measure also requires replacement of existing 	LS

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
Issue	Impact	Mitigation	 Mitigation Measure(s) lighting on the project site if not already highly energy efficient. D. Implement a Transportation Demand Management (TDM) Plan during construction that includes elements such as the promotion of ride sharing and carpooling, restricts PM peak-hour trips, and provides subsidized transit passes for construction workers to reduce worker trips and parking demand. E. Use recycled, regional, and rapidly renewable materials where appropriate during project construction. F. Install occupancy sensors for all vending machines in new buildings at the project site. G. Implement onsite renewable energy at new buildings, unless the system cannot be built in light of structural and operational constraints. H. Incorporate energy efficiency design features that exceed the most recent Title 24 California Building Energy Efficiency Standards. Measures that may be implemented include: o High-performance glazing with a low solar heat gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination; o Increased insulation; o Cool roofs with an R value of 30 or better; o Sun shading devices, as appropriate; o High-efficiency heating, ventilating, and airconditioning systems and controls: 	After Mitigation
			 Programmable thermostats; Variable-frequency drives: and 	
			• • • • • • • • • • • • • • • • • • •	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s) High-efficiency indoor and outdoor lighting and control systems. Ensure all outdoor lighting is equipped with LED fixtures. 	Significance After Mitigation
4.4 Hazards and	Hazardous Materials			
Project Impacts				
Release of Hazardous Materials into the Environment	Impact-HAZ-1: Landside Potential to Encounter Hazardous Materials in Soil and/or Groundwater. Based on documentation compiled from database searches, hydrocarbon- impacted soils are present south of Pier 3 along the bulkhead, related to historic unauthorized releases. Construction and excavation in this area may encounter contaminated soils. The disturbance of contaminated soils could potentially result in a release of hazardous materials and exacerbate the existing hazardous conditions at the project site. Furthermore, historical information reviewed indicates the project site has a history of handling, disposal, and releases of hazardous materials that have affected soil and/or groundwater on site. In addition, adjacent offsite properties have involved handling, disposal, and releases of hazardous materials that could have migrated to the project site, potentially resulting in contaminated soil and/or groundwater. Therefore, undocumented contaminated soils	PS	 MM-HAZ-1: Implement a (Landside) Soil and Groundwater Management Program. The project proponent shall retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer (licensed professional) with experience in contaminated site redevelopment and restoration to oversee the implementation of a <i>Soil and Groundwater</i> <i>Management Program</i>, which must be approved by the District. The Soil and Groundwater Management Program will be implemented prior to and throughout the duration of landside construction activities for the proposed project. Each of the elements included in the Soil and Groundwater Management Program shall include the following elements, each of which have specific timing mechanisms as identified in the description of each element below: A. Site Contamination Characterization Report B. Soil and Groundwater Disposal Plan D. Site Worker Health and Safety Plan E. Site-Specific Community Health and Safety Program F. Monitoring and Reporting Program G. Project Closeout Report A. A Site Contamination Characterization Report (Contamination Characterization Report (Contamination Characterization Report program A Site Contamination Characterization Report (Contamination Characterization Report) shall be prepared which delineates the vertical and lateral extent and concentration of landside residual 	LS

San Diego Unified Port District

		Significance Before		Significance After
Issue	Impact	Mitigation	Mitigation Measure(s)	Mitigation
Issue	Impact and/or groundwater may be encountered during landside construction activities, which could potentially result in a release of hazardous materials and exacerbate the existing hazardous conditions at the project site. The potential to encounter prior documented or undocumented contaminants would be a significant impact.	Significance Before Mitigation	Mitigation Measure(s) contamination in project site areas proposed for construction and/or ground disturbance, including, but not limited to, areas with unauthorized releases identified along the landward side of the southern bulkhead between Pier 3 and Pier 4. The Contamination Characterization Report shall be prepared prior to commencing landside construction consistent with the ASTM D5730-04 guidance, the DTSC <i>Preliminary Endangerment</i> <i>Assessment Guidance Manual</i> , and/or other similar guidance for industry standards. The Contamination Characterization Report shall include a compilation of data based on (1) historical records review and (2) investigative and historical assessment reports performed on the project site. If the licensed professional concludes, after the initial characterization based on past records and reports, that either (1) there are data gaps, or (2) historical records do not accurately characterize potential site contamination, new soil and groundwater sampling to characterize the existing vertical and lateral extent and concentration of landside residual contamination must be completed. Any sampling and analysis conducted must be consistent with applicable regulations utilizing the methodologies outlined in ASTM Standard E1903, County of San Diego DEH <i>Site Assessment and Mitigation (SAM)</i> <i>Manual</i> , or some other well-accepted methodology	Significance After Mitigation
			Diego DEH Site Assessment and Mitigation (SAM)	
			Manual, or some other well-accepted methodology	
			characterization, as approved by the District. The	
			project proponent also shall enroll in the Voluntary	
			Assistance Program (VAP) with the County of San	
			Diego Department of Environmental Health and shall submit the results of the Contamination	
			Characterization Report to DEH staff for regulatory concurrence of results.	

Issue	Impact	Significance Before Mitigation	Mi	tigation Measure(s)	Significance After Mitigation
			B.	A Soil and Groundwater Testing and Profiling Plan (Testing and Profiling Plan) shall be prepared for those soils and materials that are proposed to be disposed of during construction. The Testing and Profiling Plan shall be prepared after the Contamination Characterization Report and shall utilize the information in the Contamination Characterization Report and include protocols for independent testing of soils and materials identified for disposal for all potential contaminants of concern, including CA Title 22 metals, PAHs, volatile organic compounds, pesticides, PCBs, semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. The Testing and Profiling Plan shall document compliance with CA Title 22 for proper identification and segregation of hazardous and solid waste as needed for acceptance at a CA Title 22–compliant offsite disposal facility. A Soil and Groundwater Disposal Plan (Disposal Plan) shall be prepared following the Testing and Profiling Plan, which shall describe the process for excavating, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. The Disposal Plan shall be prepared in accordance with the Testing and Profiling Plan and shall adhere to applicable regulatory requirements and standards, including CA Title 22 Division 4.5, and DOT Title 40 CFR Part 263, CAC Title 27, and ensure compliance with applicable regulations for the disturbance, handling of contaminated materials, prevention of cross contamination, spills, or releases, such as segregation into separate piles for waste profile analysis based on organic vapor, and visual and odor monitoring. All excavation activities shall be actively monitored for the potential presence of contaminated soils and for	

compliance with the Disposal Plan. <u>If dis</u> contaminated soils or groundwater is re- shall be done under the oversight of the San Diego Department of Environmental which oversees hazardous materials issu Diego County. D. A Site Worker Health and Safety Plan (Saj	0	gation
 shall be prepared prior to initiation of co to ensure compliance with 29 CFR Part 1 Hazardous Waste Operations and Emerg Response regulations for site workers at uncontrolled hazardous waste sites. The shall be prepared after, and shall be base Contamination Characterization Report a planned site construction activity to ensu workers potentially exposed to site contr in soil and groundwater are trained, equ monitored during site activity. The traini equipment, and monitoring activities des the Safety Plan shall ensure that workers exposed to contaminants above personn limits established by Table Z, 29 CFR Par 1910.1000. The Safety Plan shall be sign implemented under the oversight of a Ca State Certified Industrial Hygienist. E. A Site-Specific Community Health and Saf Program (Safety Program) shall be prepare the District Development Services Depar approval of the project's landside workin 	lan. <u>If disposal of</u> <u>ater is required, it</u> <u>ht of the County of</u> <u>onmental Health.</u> <u>erials issues in San</u> <i>P Plan (Safety Plan)</i> tion of construction FR Part 120, nd Emergency orkers at sites. The Safety Plan Ill be based on, the n Report and the ity to ensure that site site contamination ined, equipped, and The training, ivities described in t workers are not e personnel exposure O CFR Part Il be signed by and tht of a California nist. <i>ch and Safety</i> be prepared prior to ces Department's de working	gation
drawings, which addresses the chemical constituents of concern for the project si to minimize the exposure of chemical con during construction to the surrounding o The Safety Program shall be prepared in with the County of San Diego DEH's <i>Site</i> .	chemical project site in order emical constituents ounding community. epared in accordance EH's <i>Site Assessment</i>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Issue	Impact	Mitigation	 Mitigation Measure(s) Manual (1986). The Safety Program shall include detailed plans on environmental and personal air monitoring, dust control, and other appropriate construction means and methods to minimize the public's exposure to the chemical constituents of concern. The Safety Program shall be reviewed, approved, and monitored for compliance by the District. Following District Environmental Protection Department approval, the project proponent shall implement the Safety Program throughout ground-disturbing construction activities and any other construction activity that may encounter or use chemicals of concern. The contractor shall utilize a Certified Industrial Hygienist with significant experience with chemicals of concern on the project site to actively monitor compliance with the Safety Program and ensure its proper implementation during project construction activities that use substances that may include chemicals of concern. F. Monitoring and Reporting Program. During and upon completion of landside construction, the project proponent shall prepare a Monitoring and Reporting Program and submit it to the District's Development Services Department and the RWQCB for review and approval. The Monitoring and 	Mitigation
			Reporting Program shall document implementation of the Soil and Groundwater Management Program. The Monitoring and Reporting Program shall include the project proponent's submittal of	
			monthly reports (during project elements that include active landside disturbance activities, starting with the first ground disturbance activities and ending at the completion of ground disturbance activities of a project element) to the District's Development Services Department, signed and	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
15500		Mitigation	 certified by the licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer, as applicable, documenting compliance with the provisions of the Soil and Groundwater Management Program and the overall Soil and Groundwater Management Program. G. Project Closeout Report. Within 30 days of completion of landside construction activities the project proponent shall prepare a Project Closeout Report and submit it to the District's Development Services Department for review and approval. The Project Closeout Report shall summarize all disturbance, demolition, and construction activity at the site and document implementation of the Soil and Groundwater Management Program. The Project Closeout Report would also include the reports and closure documentation associated with the VAP case opened for the site, including the correspondence with the DEH and the closure letter. 	Intigation
	Impact-HAZ-2: Waterside Potential to Encounter Hazardous Materials in Sediment. Historical information, reports, and site assessments compiled from database searches indicate that it is reasonably foreseeable that contaminated sediments may be encountered during in-water construction activities including dredging and pile installation/removal associated with Project Element 1 (Pride of San Diego Drydock Dredging/Mooring), Project Element 2 (Pride of San Diego Wharf Replacement/Realignment), Project Element 3 (Fender System Repair and Replacement) Project Element 4 (Pier	PS	 MM-HAZ-2: Implement a Dredging Management Program. The project proponent shall implement a Dredging Management Program (DMP) that complies with applicable permit requirements, including the Section 404 permit and the Section 401 water quality certification. The DMP shall be implemented prior to, during, and upon completion of dredging activities for the proposed project. A clamshell dredger shall be used for all project dredging activities. The DMP shall contain the following elements, each of which have specific timing mechanisms as identified in the description of each element below: A. Dredging Operations Plan. Prior to commencement of dredging activities, the project proponent shall develop a Dredging Operations Plan that identifies the standard operating procedures (SOPs) that will 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Massura(c)	Significance After Mitigation
	3 South Nearshore Dredging), Project Element 5 (Pier 3 Mooring Dolphin), Project Element 6 (Pier 3 North Lunchroom Wharf Replacement and Realignment), Project Element 7 (Quay Wall Modifications), Project Element 8 (Port Security Barrier Replacement), and Project Element 9 (Small Boat Mooring Float Replacement). As such, in-water construction activities that disturb the sediment would potentially result in a release of hazardous materials and create a potentially significant hazard to the environment, regardless of whether it occurs within the CAO area or not, by bringing and releasing subsurface sediment contaminants to the surface of the Bay floor or exacerbating the existing hazardous conditions by spreading contaminated sediment; impacts would be significant.		 be implemented during dredging activities. The Dredging Operations Plan shall be submitted to the District's Development Services Department for review and approval prior to commencing dredging activities. The Dredging Operations Plan shall include step-by-step procedures to complete dredging operations safely, in an efficient manner, and to avoid releases of hazardous materials into the environment. The SOPs shall include guidance with respect to, among other things, the following: Proper operation of the dredge bucket; Proper positioning of the barge vessel to minimize propeller wash; and Placement and maintenance of double silt curtains. In addition, the Dredging Operations Plan shall identify sediment control BMPs to be implemented during dredging activities. The project proponent, or their contractor, shall at a minimum, implement the following BMPs for the safe handling of dredged material: Sediment Unloading. During dredging activities, the contractor shall reduce water column impacts by controlling the swing radius of the unloading equipment, using a spillage plate, and using a power wash unit to reduce impacts related to spillage from the excavator arm onto transport Vehicles. During dredging activities, the contractor shall ensure that truck volumes are limited to 90 percent based on visual observations, and that trucks shall be covered and secured per Caltrans regulations during transport to the disposal facility. 	

Institution Mitigation Mitigation Mitigation Mitigation • Sediment Loading. During dredging activities, the contractor shall ensure that trucks are loaded within a constructed loading zone to confine sediment spilled during the loading process. • Sediment spilled during the loading during the loading process. B. Contingency Plan. Prior to commencement of dredging activities, the project proponent shall develop a Contingency Plan, which shall be implemented in the case of equipment or operational failures, such as, but not limited to, silt curtain damage, spillage of sediment resulting from		I	Significance Before Minimum		Significance After
B. <i>Contingency Plan</i> . Prior to commencement of dredging activities, the project proponent shall develop a Contingency Plan, which shall be implemented in the case of equipment or operational failures, such as, but not limited to, silt curtain damage, spillage of sediment resulting from	Issue	Impact	Mitigation	Sediment Loading. During dredging activities, the contractor shall ensure that trucks are loaded within a constructed loading zone to confine sediment spilled during the loading process.	Mitigation
 overloading the material barge, contact with sediment on or around the materials barge during loading, equipment failure of bucket or shear pin during loading procedures, or material barge or tugboat collision with another vessel. The Contingency Plan shall be submitted to the District's Development Services Department for review and approval prior to commencing dredging activities. The Contingency Plan shall contain step-by-step procedures for response to equipment or operational failures and shall reduce the potential for the release of sediments to the water column. <i>C. Health and Safety Plan for Dredging Activities</i>. Prior to the commencement of dredging activities, the project proponent shall prepare a Health and Safety Plan for Dredging Activities (Health and Safety Plan) and submit the plan to the District's Environmental Protection Department for review and approval. Following District approval, the project proponent shall implement the Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration activity. The Health and Safety Plan for the duration activity. The Health and Safety Plan for the duration activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan for the duration for the dredging activity. The Health and Safety Plan for the duration for the dredging activity.				 B. Contingency Plan. Prior to commencement of dredging activities, the project proponent shall develop a Contingency Plan, which shall be implemented in the case of equipment or operational failures, such as, but not limited to, silt curtain damage, spillage of sediment resulting from overloading the material barge, contact with sediment on or around the materials barge during loading, equipment failure of bucket or shear pin during loading procedures, or material barge or tugboat collision with another vessel. The Contingency Plan shall be submitted to the District's Development Services Department for review and approval prior to commencing dredging activities. The Contingency Plan shall contain step-by-step procedures for response to equipment or operational failures and shall reduce the potential for the release of sediments to the water column. C. Health and Safety Plan for Dredging Activities. Prior to the commencement of dredging activities, the project proponent shall prepare a Health and Safety Plan for Dredging Activities, the project proponent shall prepare a Health and Safety Plan for Dredging Activities [Health and Safety Plan] and submit the plan to the District's Environmental Protection Department for review and approval. Following District approval, the project proponent shall implement the Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan shall be prepared in general accordance with Federal Occupational Safety and Health Administration Hazardous Waste Operations and Emorgency Activation Safety Plan for CEP 1010 120 	

lagua	Impost	Significance Before Mitigation	Mitigation Macquero(a)	Significance After Mitigation
13500	mpact		 and Title 8 California Code of Regulations (CCR) Section 5192. The Health and Safety Plan shall provide procedures for workers for safe operation, personal protection, and emergency response during dredging operations. D. Communication Plan. Prior to the initiation of dredging activities, the project proponent or their contractor shall prepare a Communication Plan and operation guidelines for communications between the U.S. Coast Guard and Harbor Police and all vessel operators to ensure the safe movement of project vessels from the dredge site to the unloading area. The Communication Plan shall be submitted to the District's Development Services Department and Harbor Police for review and approval prior to commencing dredging activities. After the District's approval, the contractor shall implement the Communication Plan throughout the duration of dredging activities. E. Sediment Sampling and Remediation. Following the completion of dredging, the project proponent must adhere to the following: 	
			 If no in-water construction work that could potentially disturb sediment is proposed for a dredging area (a specific area that was subject to dredging within the project site), or if proposed in-water construction work proposed for the dredging area will not commence within 90 days after the completion of dredging, sediment sampling and testing shall be conducted to determine whether contaminated sediments may have been exposed by dredging activities. Any sampling shall be conducted in accordance with Investigative Order No. R9- 	

		Significance Before			Significance After
Issue	Impact	Mitigation	Mitigat	ion Measure(s)	Mitigation
				2017-0083 (IO), utilizing the methods required	
				by the IO. The sediment samples shall be tested	
				for the presence of the COCs identified in the	
				CAO R9-2012-0024. A report explaining the	
				sampling methodology used and containing the	
				results of any sampling shall be provided to the	
				RWQCB for review and approval, and to the	
				District for concurrence. If no subsequent in-	
				water construction work is proposed within the	
				dredging area, the project proponent must	
				comply with mitigation measure MM-HAZ-5.	
				The project proponent must also comply with	
				mitigation measure MM-HAZ-3 prior to any in-	
				water construction.	
			2.	If in-water construction work that may	
				potentially disturb sediment is proposed for	
				a dredging area and will commence within 90	
				days after the completion of dredging, the	
				project proponent must implement a Sediment	
				Management Program, including sampling, as	
				required by mitigation measure MM-HAZ-3 ,	
				and must comply with all other mitigation	
				measures.	

Notes: NI = No Impact; LS = Less Than Significant; PS = Potentially Significant; SU = Significant and Unavoidable

4.2.2 Changes to Chapter 3, Project Description

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3.5.3 Demolition and Disposal

As shown in Table 3-3, eight of the project elements require demolition of existing structures and disposal of the subsequent debris. The construction waste generated from this demolition would be transported from the site and disposed of at an approved landfill. <u>An approved landfill as discussed in the Draft EIR refers to landfills and disposal sites permitted by the California Department of Resources Recycling and Recovery, regulated by Title 27, California Code of Regulations. A minimum of 65 percent of the *c*Construction waste would be recycled in accordance with the City of San Diego Construction and Demolition Debris Ordinance.</u>

4.2.3 Changes to Section 4.1, Air Quality and Health Risk

Section 4.1.3.3

Page 4.1-14

Maritime Clean Air Strategy (MCAS)

The Maritime Clean Air Strategy (MCAS) is a strategic planning document, adopted by the Board of Port Commissioners (Board) on October 12, 2021, that identifies short-term and long-term goals and objectives intended to facilitate achievement of a clean, sustainable, and modern seaport.¹ The goals and objectives of the MCAS are aspirational, non-binding, and to be pursued through a variety of means—both known and unknown, and subject to feasibility and technological advances. Additionally, as the MCAS is a strategy plan, its implementation 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 toward achievement of the MCAS goals and objectives. The MCAS also 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

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

pursued by the District, through a variety of future means, measures, projects, and initiatives.² As such, the MCAS goals and measures are crafted as to-be-implemented, if feasible and through future binding actions, by the District, but not necessarily on a project-by-project basis (see, for example, preparation of transition plans, coordination with stakeholders, working with the APCD and CARB, and other measures). Nevertheless, to provide full informational disclosure and public participation, the Final EIR includes an analysis of whether the proposed project would conflict with or obstruct implementation of the MCAS.

The MCAS identifies aspirational goals to reduce baseline air emissions that negatively impact air quality. Diesel Particulate Matter (DPM) is one toxic air contaminate targeted for reduction by the MCAS. BAE's proposed project would result in operational efficiencies that would realize a reduction in DPM emissions. As shown in Table 4.1-7, the range in tug activity on a per-call basis is expected to increase from 12,000–13,500 horsepower per call (depending on the tug mix) to 14,500 horsepower per call after implementation of the proposed project. However, given the reduction in calls, total tug horsepower is expected to decrease from 96,000–108,000 to 72,500 horsepower annually. This will decrease emissions on an annual basis through the life of the project.

Similarly, as shown in Table 4.1-8, portable equipment activity on a per call basis is not expected to change, but given the reduction in calls, total equipment horsepower is expected to decrease on an annual basis. This will decrease emissions on an annual basis through the life of the project. An estimate of existing and future daily emissions on both the daily and annual time scale is presented in Table 4.1-11.

The implementation of Project Elements 1 and 4, for instance, of the proposed project will result in a reduction of 15–29% of DPM emissions from current operations as shown in the table below. Moreover, BAE Systems proposed a project design feature, which will be in the form of a coastal development permit condition, to implement measures that achieve a minimum reduction of 20% of the DPM emissions from construction activities as analyzed and projected within the EIR. This 20% reduction was **not** assumed in the EIR's air quality analysis, which concluded that the proposed project would not produce emissions that would exceed any applicable thresholds of significance. The 20% reduction was likewise not considered in the conflict analysis included here. Thus, the analysis below is conservative and, even without the inclusion of BAE's voluntary commitment to reduce construction DPM emissions by a minimum 20%, the project would not conflict with or otherwise obstruct implementation of the MCAS, and no physical environmental impacts would result.³

² The MCAS defines "strategy" as a "generic term that encompasses plans, projects, programs, partnership, and various other efforts and initiatives that will help achieve a goal."

³ The 2018 update to the State CEQA Guidelines makes clear that analysis of a project's consistency with applicable plans should not just be on conflicts with the plan but *whether a conflict could result in a significant physical impact*. The conflict itself is not an impact. Again, the proposed project does not conflict with the MCAS (or the CERP).

	_			An	nual Emiss	<u>ions</u>		
		<u>ROG</u>	<u>NO</u> x	<u>CO</u>	<u>PM10</u>	<u>PM2.5</u>	<u>SOx</u>	<u>CO₂e</u>
Existing - Scenar	<u>rio 1</u>							
<u>0</u>	<u>)ffroad</u>	<u>0.00</u>	<u>0.04</u>	<u>0.11</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>25</u>
<u>T</u>	<u>'ugs</u>	<u>0.03</u>	<u>0.24</u>	<u>0.22</u>	<u>0.01</u>	<u>0.01</u>	<u>0.00</u>	<u>24</u>
<u>T</u>	<u>'otal</u>	<u>0.03</u>	<u>0.27</u>	<u>0.32</u>	<u>0.007</u>	<u>0.01</u>	<u>0.00</u>	<u>49</u>
Proposed Project	<u>xt</u>							
<u>0</u>	<u>)ffroad</u>	<u>0.00</u>	<u>0.02</u>	<u>0.07</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>15</u>
<u>T</u>	<u>'ugs</u>	<u>0.02</u>	<u>0.19</u>	<u>0.17</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>19</u>
<u>T</u>	<u>'otal</u>	<u>0.03</u>	<u>0.21</u>	<u>0.23</u>	<u>0.006</u>	<u>0.01</u>	<u>0.00</u>	<u>34</u>
<u></u>	<u>Change</u>	<u>-0.008</u>	<u>-0.059</u>	<u>-0.091</u>	<u>-0.0010</u>	<u>-0.001</u>	<u>0.000</u>	<u>-15</u>
Existing - Scenar	<u>rio 2</u>							
<u>0</u>	<u>)ffroad</u>	<u>0.004</u>	<u>0.036</u>	<u>0.109</u>	<u>0.001</u>	<u>0.001</u>	<u>0.000</u>	<u>25</u>
<u>T</u>	<u>'ugs</u>	<u>0.034</u>	<u>0.276</u>	<u>0.245</u>	<u>0.007</u>	<u>0.007</u>	<u>0.000</u>	<u>28</u>
<u></u>	<u>'otal</u>	<u>0.038</u>	<u>0.312</u>	<u>0.354</u>	<u>0.008</u>	<u>0.008</u>	<u>0.001</u>	<u>52</u>
Proposed Projec	<u>.t</u>							
<u>0</u>	<u>)ffroad</u>	<u>0.002</u>	<u>0.022</u>	<u>0.068</u>	<u>0.001</u>	<u>0.001</u>	<u>0.000</u>	<u>15</u>
<u>T</u>	<u>'ugs</u>	<u>0.023</u>	<u>0.192</u>	<u>0.165</u>	<u>0.005</u>	<u>0.005</u>	<u>0.000</u>	<u>19</u>
<u>T</u>	<u>'otal</u>	<u>0.025</u>	<u>0.214</u>	<u>0.233</u>	<u>0.006</u>	<u>0.006</u>	<u>0.000</u>	<u>34</u>
<u></u>	<u>Change</u>	<u>-0.013</u>	<u>-0.098</u>	<u>-0.120</u>	<u>-0.0023</u>	<u>-0.002</u>	<u>0.000</u>	<u>-18</u>
<u>% Change after I</u>	<u>Project</u>							
<u>S</u>	<u>cenario 1</u>	<u>-24%</u>	<u>-22%</u>	<u>-28%</u>	<u>-15%</u>	<u>-15%</u>	<u>-30%</u>	<u>-30%</u>
<u>S</u>	<u>cenario 2</u>	<u>-33%</u>	<u>-32%</u>	<u>-34%</u>	<u>-29%</u>	<u>-29%</u>	<u>-35%</u>	<u>-35%</u>
								-
					<u>DPM</u> lb/yr	<u>Project</u> <u>lb/yr</u>	<u>lbs/yr</u> <u>savings</u>	<u>%</u> savings
				Scenario 1	<u>13.4</u>	11.3467	-2.0	<u>-15%</u>
				<u>Scenario 2</u>	<u>16.0</u>		<u>-4.7</u>	<u>-29%</u>

Table 4.1-6a. DPM Emissions Reductions

Based on the proposed Project Description (Chapter 3 of Draft EIR) and Environmental Setting (Chapter 2 of Draft EIR), the following tables identify whether the proposed project conflicts with or obstructs implementation of the goals and objectives of the District's MCAS so that the public and Board of Port Commissioners have complete and accurate information regarding the proposed project's likely near-term and long-term impacts, if any. Merely being inconsistent with an MCAS goal or objective would not necessarily be considered a significant impact under CEQA; rather, the inconsistency must result in a substantial adverse effect on the environment. No inconsistencies have been identified that would result in a significant impact on the environment.

Table 4.1-6b. BAE Systems Waterfront Improvement Project Maritime Clean Air Strategy Conflict Analysis

Long-term Goals

Proposed Project Consistency

As part of the MCAS, the Board identified the following long-term goals that are intended to identify a future state that the District ideally desires to achieve with its partners. Metaphorically, the long-term goals may serve as a North Star for the MCAS and as a way to aspire to where the District would like to be in 2030.

Long-term Goal for Trucks: In advance of the State's goals identified in Executive Order No. N-79-20 and attain 100% ZE truck trips by 2030 for all trucks that call to the Port's two marine cargo terminals.

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.

Long-term Goal for Harbor Craft: Tugboatrelated Diesel Particulate Matter (DPM) emissions identified in the Port's Emissions Inventory (2019) will be reduced by half by transitioning to ZE/nearzero emission (NZE) technologies and/or other lower-emitting engines or alternative fuels.

Long-term Goal for Port Fleet: Transition ZE/NZE emission technologies in manner that meets operational needs and reduces emissions, as outlined below:

- Transition light-, medium-, and heavyduty 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 proposed project is not located at one of the Port's marine terminals.

Not Applicable. The proposed project does not involve the use of cargo handling equipment.

Consistent. The proposed project would reduce DPM associated Harbor Craft (specifically assist tug activity) by reducing potential berthing capacity by two vessels and reducing the number of vessels that could be serviced at berth annually by three vessels. Because tugs are required to transition a ship to or from a BAE Systems pier or in or out of drydock, the reduction in annual vessel calls would decrease tugboat activity, thereby reducing emissions. However, even if the project did increase operations, the project would not obstruct transition of tugs to technologies that reduce emissions (as tugs are owned by other operators and such transition [opportunities] is not related to operations of the shipyards).

Not Applicable. BAE Systems is a privately owned Port-owned fleet of vehicles **and** equipment to and operated shipyard facility. As such, the proposed project is not in conflict with and does not obstruct the Port of San Diego's ability to transition Portowned fleet vehicles and equipment to ZE/NZE emission technologies.
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 proposed project is not located at one of the Port's marine terminals. When vessels berth or dock at BAE Systems for repairs, upgrades, and maintenance, their engines are off. Portable diesel engines and portable fire pumps (for fire protection) are placed on board the ships to supplement the vessels' power needs and to ensure safe movement within the berthing area. The reduction in annual vessel calls would decrease portable diesel engine and fire pump activity, thereby reducing emissions.The vessels used for hoteling sailors (living barges) are all plugged in directly to shore power. There are no engines on these vessels and they are towed into place. BAE Systems provides all services such as water and sewer.The proposed project is not in conflict with and does not obstruct the District from advancing implementation of shore power infrastructure and/or alternative technology to reduce ocean-going vessel emissions.	Long-term Goals	Proposed Project 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 proposed project is not located at one of the Port's marine terminals. When vessels berth or dock at BAE Systems for repairs, upgrades, and maintenance, their engines are off. Portable diesel engines and portable fire pumps (for fire protection) are placed on board the ships to supplement the vessels' power needs and to ensure safe movement within the berthing area. The reduction in annual vessel calls would decrease portable diesel engine and fire pump activity, thereby reducing emissions. The vessels used for hoteling sailors (living barges) are all plugged in directly to shore power. There are no engines on these vessels and they are towed into place. BAE Systems provides all services such as water and sewer. The proposed project is not in conflict with and does not obstruct the District from advancing implementation of shore power infrastructure and/or alternative technology to reduce ocean-going vessel emissions.

Table 4.1-6c. Draft Port Master Plan Maritime Clean Air Strategy Conflict Analysis

<u>Near-term Goals and Objectives</u> (2021 to June 30, 2026)	Proposed Project Consistency
Health	
Health Goal I. Protect and improve community health by reducing emissions and lessening Portside Community residents' exposure to poor air quality.	Consistent. The proposed project would result in the reduction of emissions from operations by reducing the potential berthing capacity of the site by two vessels and reducing the number of vessels that could be serviced at berth annually by three vessels (see Table 3-6). This would reduce emissions. The project would also increase operational efficiencies (no longer needing to move the dry dock), which would have the effect of reducing site emissions. Emissions from other sources not directly related to the change in calls, including energy and water consumption, motor vehicles trips, wastewater and waste generation, and ship repair processes, are also likely to decrease consistent with the decrease in number of vessels being serviced annually, the reduction in the number of tugs required, and the decrease in number of employees. BAE Systems' 2018 Sustainability Booklet identifies various programs related to emissions reductions, resource consumption reductions, and investments in clean equipment, including installing two electric crane at

<u>Near-term Goals and Objectives</u> (2021 to June 30, 2026)	Proposed Project Consistency
	<u>Pier 4, using an electric vehicle for movements</u> around the yard, and purchasing an electric drayage truck for material movements.
 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. a. Reduce DPM Emissions: The Health Risk Assessment (HRA) may be used to inform an emission reduction goal. b. Reduce Health Risk: The HRA may be used to inform a cancer risk reduction goal. 	Not Applicable. The proposed project is not located at one of the Port's marine terminals. The proposed project is not in conflict with and would not obstruct the District's ability to identify existing health risk levels generated at the Tenth Avenue Marine Terminal and National City Marine Terminal, nor would it affect the District's ability to inform an emission reduction goal or cancer risk reduction goal at the marine terminals.
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 pertains to sharing of information between the APCD and the District.
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 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.	Not Applicable. The Port Maritime Industrial Impact Fund is administered by the District, not BAE Systems; therefore, the proposed project is not in conflict with and would not obstruct the District's ability to pursue an MOA with the SDAPCD to purchase and install residential 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 project is not in conflict with and does not obstruct the District's ability to collaborate with the SDAPCD to develop new rules to control emissions.
Community	
<u>Community Goal 1: Enrich the AB 617 Portside</u> <u>Community through Education, Engagement, and</u> <u>Urban Greening.</u>	Not Applicable. The proposed project is not in conflict with and does not obstruct the District's ability to enrich the AB 617 Portside Community through community education, engagement, and urban greening.

<u>Near-term Goals and Objectives</u> (2021 to June 30, 2026)	Proposed Project Consistency
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. Community Objective 1 is applicable to the District, to be implemented when identifying, considering, and potentially approving projects, initiatives and other measures to facilitate emissions reductions. The proposed project is a waterfront improvement project that would result in lower operational emissions once the proposed project elements are constructed. As such, it is not in conflict with and does not obstruct the District's ability to engage with and received input from stakeholders and the public on the selection, deployment, and ongoing monitoring of emission reduction projects.
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 project is not in <u>conflict with and does not obstruct the District's</u> ability to provide status updates and/or to inform various governing and/or advisory bodies of the District's emission reduction projects.
<u>Community Objective 3: Port staff will</u> <u>convene a group of stakeholders to explore</u> <u>increasing tree canopy in the Portside</u> <u>Community and continue to work with groups</u> <u>like Urban Corps of San Diego County to</u> <u>advance this objective.</u>	Not Applicable. The proposed project is not in conflict with and does not obstruct the District's ability to engage stakeholders on issues of community concern.
<u>Community Objective 4: Support the</u> 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 project is not in conflict with and does not obstruct the District's ability to support the expansion of existing outdoor educational programs to youth who 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 S pecific, M easurable, A ttainable, R elevant, T imebound, Inclusive , and E quitable that reflects updated technology, regulations, and market conditions.	Not Applicable. The proposed project is not in conflict 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.	Consistent. BAE Systems provides and maintains industrial facilities (e.g., production, shops, offices, and related utilities and infrastructure) that involve the moored vessels for maintenance, repair, overhaul, and conversion (MROC) activities of larger naval and

and conversion (MROC) activities of larger naval and commercial vessels in support of its primary customer, the U.S. Navy. Consequently, BAE Systems

Near-term Goals and Objectives	
<u>(2021 to June 30, 2026)</u>	Proposed Project Consistency
	operations does not involve the use of cargo handling equipment as the shipyard does not receive, store, or transport cargo.
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 (CO ₂ e) below 2019 levels by January 1, 2025.	Not Applicable. Operation of the existing shipyard does not involve the use of cargo handling equipment nor movement of cargo and it is not in conflict with and does not obstruct the District's ability to reduce NO _x , DPM, and CO ₂ e emissions, associated with cargo handling equipment, which operate at the District's marine cargo terminals.
Harbor Craft_	
Harbor Craft Goal 1: Reduce emissions from Harbor Craft by advancing emerging zero emission and advanced technologies.	Not Applicable. The proposed project would not conflict with or obstruct a future transition to advanced Harbor Craft technologies that would reduce emissions. The proposed project would reduce Harbor Craft emissions (specifically from assist tugs) by reducing the potential berthing capacity of the site by two vessels and would reduce the number of vessels that could be serviced at berth annually by three vessels (see Table 3-6).
Harbor Craft Objective 1: Facilitate implementation of the first all-electric tugboat in the United States by June 30, 2026.	Not Applicable. Shipyard operations require the periodic use of tugboats to assist the movement of vessels in and out of mooring. However, BAE Systems does not control tugboats, nor would implementation of its proposed project obstruct pursuit of an all- electric tugboat in San Diego Bay. These harbor craft are owned by third parties, not BAE Systems, and the implementation of all-electric tugboats is not within the control of BAE Systems. However, it should also be noted that BAE Systems has indicated a willingness to contract with vendors providing the lowest emission technologies for construction equipment and harbor craft provided they are able to safely perform the necessary duties.
 Harbor Craft Objective 2: Identify suitable projects to assist with advancing the State's goals for commercial harbor craft by supporting: a. Existing fuel docks with the transition to renewable diesel by January 1, 2023; b. Installation and maintenance of landside shore power for all facilities that receive more than 50 visits per year by 2024; c. All new excursion vessels transition to zero emission capable hybrid technologies starting on January 1, 2025; and d. Short run ferry-operators transition to zero emission technologies for all new and in 	Not Applicable. The proposed project does not involve the use of fueling docks; BAE Systems operations experience an average of eight vessels per year; no excursion or short-run ferry operations are associated with shipyard operations.

Proposed Project Consistency

<u>Near-term Goals and Objectives</u> (2021 to June 30, 2026)

use short-run (under 3 nautical miles) trips starting on January 1, 2026.

<u>Truck</u>

Truck Goal 1: Improve the air quality in the	Not Applicable. The proposed project is a waterfront
Portside Community by accelerating the	improvement project for a privately owned and
implementation of zero emission/near zero	operated shipyard facility, and it does not involve
emission trucks.	heavy duty trucks that transport cargo to/from the
	Port's two marine cargo terminals. As such, the
-	proposed project is not in conflict with and does not
	obstruct the District's ability to accelerate the
	implementation of zero/near-zero emission trucks.
	Although the proposed project does not involve the
	use of heavy-duty trucks to transport cargo to/from
	the Port's two marine cargo terminals, the proposed
	project is conditioned within the Coastal
	Development Permit to avoid 20% of DPM emissions
	from construction activities. The 20% reduction will
	primarily be achieved through the contracting of the
	cleanest powered/operating construction equipment.
	These procurement efforts will help accelerate the
	transition of zero/near-zero emission construction
	trucks and equipment by signaling to the
	construction industry that diesel-powered operations
	that occur on District tidelands must begin to
	transition to cleaner technology, regardless of
	existing laws, rules or regulations at the federal, state,
	regional, and local levels.
Truck Objective 1A: Prepare a heavy-duty	Not Applicable. Pursuant to Objective 1A, the
truck transition plan by June 30, 2022 with ZE	District is preparing a heavy duty truck transition
<u>heavy-duty truck transition benchmarks of</u>	plan, the details of which will include provisions that
40% of the Port's annual truck trips by June	will aid and further facilitate the transition to ZE
30, 2026 and 100% by December 31, 2030	truck technologies, consistent with the objective. The
that includes the following: i. A compilation of	proposed project will not conflict with or obstruct the
all foreseeable tasks and their timelines	District's ability to prepare a truck transition plan
including: charging infrastructure	that includes the three components that the Board
development; planning and implementation of	<u>directed staff to include in the heavy-duty truck</u>
<u>a short-haul truck program; and creation of a</u>	<u>transition plan. Further, BAE Systems has</u>
<u>truck registry. ii. Development of key policy</u>	implemented, and will continue to implement,
concepts such as additional revenue source	emissions-reduction technologies throughout its
mechanisms and guidelines to utilize them:	leasehold, as opportunities become available. BAE
and new lease provisions for ZE truck	Systems currently operates electric cars and one all-
requirements. This section should include the	<u>electric on-road heavy-duty truck. It also maintains a</u>
process required for consideration and	heavy-duty vehicle charging station and has replaced
adoption by the Board as well as their	diesei tuei forklitts with propane forklitts. Finally,
projected hearing dates. III. Compilation and	BAE Systems electrified the Pride of San Diego dry
analysis of truck data (e.g. truck ownership,	aock for aocking and undocking evolutions, which
and howard) needed to mean the transition	was completed in 2016.
and beyond) needed to prepare the transition	
and beyond) needed to prepare the transition plan.	was completed in 2010.

<u>Near-term Goals and Objectives</u> (2021 to June 30, 2026)	Proposed Project Consistency
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 project is not in conflict 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 project is not in conflict 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 <u>California Air Resources Board, the Port will</u> <u>utilize a truck registry or other system to</u> <u>summarize annual truck trips to the Port's</u> <u>marine cargo terminals and measure progress</u> <u>to achieve Port goals.</u>	Not Applicable. The proposed project is not located at one of the marine terminals; it is not in conflict with and does not obstruct the District's ability to create and/or utilize a truck registry system to gain additional information relating to trucks in the Port's marine 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 project is not in conflict 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 BAE systems shipyard is not located at one of the District's marine cargo terminals.
Truck Objective 2A: Within the fourth quarter of calendar year 2022, present a concept plan to the Board for its consideration that identifies four potential public-facing medium-duty/heavy-duty charging locations within the San Diego Region to support deployment of zero emission trucks, which may include locations in close proximity to or on the Tenth Avenue Marine Terminal and/or the National City Marine Terminal.	Not Applicable. The proposed project is not in conflict with and does not 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	Not Applicable. The proposed project is not in conflict with and does not obstruct District staff from ensuring any marine terminal truck charging

<u>Near-term Goals and Objectives</u>	
<u>(2021 to June 30, 2026)</u>	Proposed Project Consistency
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.	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.	Consistent. Trucks over 5 tons are required to follow the designated Truck Route along Harbor Drive to access north or southbound Interstate 5 or northbound Interstate 15, as adopted on October 31, 2018, by City of San Diego Resolution R-2019-249. In addition, the proposed project requires the issuance of a Coastal Development Permit, which has been conditioned, as all projects located along the working waterfront, to require the use of the City of San Diego's designated Truck Route to further emphasize and improve compliance with the designated trucking route.
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 proposed project is not in conflict with and does not obstruct District staff from advancing the flexible freight and transit route concept.
<u>Fleet</u>	
Fleet Goal 1: Update Port purchasing and/or procurement policies to acquire zero emission vehicles and best available alternative fuels or technologies.	Not Applicable. BAE systems is not involved in the update to the District's procurement policies.
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 proposed project is not in conflict 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 proposed project is not in conflict with and does not obstruct District staff from developing a plan to transition the Port fleet to zero emission vehicles.
Fleet Goal 2: Procure zero emission vehicles and necessary electric vehicle charging equipment and infrastructure beginning in Fiscal Year 2022.	Not Applicable. BAE systems is not involved in the District's procurement of zero emission vehicles and associated infrastructure.

<u>Near-term Goals and Objectives</u> (2021 to June 30, 2026)	Proposed Project Consistency
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 proposed project is not in conflict with and does not obstruct the District from procurement of two battery electric 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. The proposed project is not in conflict with and does not obstruct District staff from identifying power needs and apply for program funding.
<u>Shipyard</u>	
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. BAE Systems shipyard is subject to numerous laws and regulations implemented by the SDAPCD and would be a willing collaborative participant during modification or update to existing regulations. The 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. The proposed project may be subject to the following SDAPCD rules, and others, during construction. Regulation 2. Rule 20.2—New Source Review Non-Major Stationary Sources: establishes Air Quality Impact Analysis (AQIA) Trigger Levels, which set emission limits for non-major new or modified stationary sources. Regulation 2. Rule 20.3—New Source Review Major Stationary Sources and Prevention of Significant Deterioration Stationary Sources and Prevention of Significant Deterioration stationary sources are defined in Regulation 8 as sources that emit 100 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and 50 tons per year of PM10, SO_x, CO, and lead; and for the opacity of emissions within the SDAPCD. The prop

<u>Near-term Goals and Objectives</u>	Proposed Project Consistency
<u>[2021 to june 30, 2026]</u>	Proposed Project Consistency
	 safety of any such persons or the public; or cause injury or damage to business or property. 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
	 Intervention content for coatings, establishes limits to the VOC content for coatings applied within the SDAPCD. Rule 67.7—Cutback and Emulsified Asphalts: establishes general provisions and limits to the VOC content for asphalt materials applied within the SDAPCD. Rule 69.2—Industrial and Commercial Boilers, Process Heaters and Steam Generators: establishes emissions testing and standards for boilers with a heat input rating of 5 million British thermal units (BTU) per hour or more. Regulation 8, Rules 1200–1210: establishes rules and procedures governing new, relocated, or modified emission units that may increase emissions of one or more TAC. While the project is not necessarily subject to the requirements of this regulation, the risk assessment guidelines and procedures published as part of this regulation are used in the health risk assessment herein.
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 proposed project is not in conflict 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.	Consistent. As shown in Tables 4.1-7, 4.1-8, and 4.1- 11, completion of Project Element 1 (Pride of San Diego Drydock Dredging and Moorage Replacement) and completion of Project Element 4 (Pier 3 South Nearshore Dredging) will result in a 15% to 29% reduction in DPM emissions annually. BAE Systems' 2018 Sustainability Booklet identifies various programs related to emissions reductions, resource consumption reductions, and investments in clean equipment, including installing two electric cranes at the drydock, installing an electric crane at Pier 4.

Near-term Goals and Objectives	
(2021 to June 30, 2026)	Proposed Project Consistency
	using an electric vehicle for movements around the yard, and purchasing an electric drayage truck for material movements. The District and BAE (and all shipyard facility operators) will continue to work together to identify additional projects, programs, or initiatives intended to reduce emissions and increase efficiency at the shipyards, and be consistent with the CERP. Implementation of the proposed project will not conflict with or obstruct future coordination and implementation of such actions.
Ocean-Going Vessels	
Ocean-going Vessels In-Transit Goal 1: Reduce annual ocean-going vessel in-transit emissions.	Not Applicable. Ocean-going vessels are used to transport goods and people to and from domestic and
-	international seaports. Ocean-going vessels visit the Port's two marine cargo terminals and the two cruise ship terminals.
	The proposed project does not involve the movement of goods or people to and from seaports, nor is the shipyard located at one of the Port's marine terminals or cruise ship terminals.
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.	Not Applicable. Vessels serviced at the proposed project site arrive from U.S. Navy Base San Diego, within San Diego Bay where the VSR program does not apply.
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. The proposed project is not located at one of the Port's marine terminals. When vessels berth or dock for repairs, upgrades, and maintenance, their engines are off. The proposed project is not in conflict with and does not obstruct the District from advancing implementation of shore power infrastructure and/or 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 project does not involve cruise ships.
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 proposed project is not located at the National City Marine Terminal.
<u>Rail</u>	
Rail Goal 1: Upgrade rail capabilities at the Tenth Avenue Marine Terminal to allow for more efficient and cleaner operations.	Not Applicable. The proposed project is not located at the Tenth Avenue Marine Terminal.

<u>Near-term Goals and Objectives</u> (2021 to June 30, 2026)	Proposed Project Consistency
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 proposed project does not involve the use of rail services; the proposed project is not located at the Tenth Avenue Marine Terminal.
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 project does not use switchers and it is not located that the Tenth Avenue Marine Terminal or the National City Marine Terminal.
Rail Objective 2: Encourage tenants that rely on rail operations that move cargo to use cleaner switchers.	Not Applicable. The proposed project does not rely on rail operations.
Enabling Goals	
Enabling Goal 1: Establish partnerships with stakeholders, tenants, and agencies to help increase the likelihood of implementation and project success.	Not Applicable. This goal focuses on partnerships established and maintained by the District to advance emission reduction projects within and around District Tidelands to achieve the goals and objectives of the MCAS. The proposed project is not in conflict with and does 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 project is not in conflict 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 project does not involve domestic shipping services and is not in conflict with and does not obstruct the District's ability to work with Caltrans 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 used to help attain emission reductions and other MCAS-related goals.	Not Applicable. This goal focuses research and analysis for the District to advance emission reduction projects within and around District Tidelands to achieve the goals and objectives of the MCAS. The proposed project is not in conflict 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.	Not Applicable. The proposed project is not in conflict with and does not obstruct the District from

<u>Near-term Goals and Objectives</u> (2021 to June 30, 2026)	Proposed Project Consistency
including technology and emission improvements associated with development, within 30-days of final approval of both documents.	creating a clearinghouse to track and monitor MCAS- related goals and objectives.
Enabling Objective 2B: Establish an Emissions Reduction Incentive Program.	Not Applicable. The proposed project is not in conflict 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 <u>Commissioners that explores a range of</u> 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 proposed project is not in conflict 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 proposed project is not in conflict 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.	Consistent. BAE has made advancements in reducing emissions from its facility, as discussed in BAE Systems' 2018 Sustainability Booklet, which identifies various programs related to emissions reductions, resource consumption reductions, and investments in clean equipment, including installing two electric cranes at the drydock, installing an electric crane at Pier 4, using an electric vehicle for movements around the yard, and purchasing an electric drayage truck for material movements. Moreover, as discussed throughout Section 4.1 and more specifically in Section 4.1.4.1, the proposed project would increase efficiencies and result in operational emissions reductions. The proposed project would not obstruct or limit the ability of the District, in conjunction with its tenants, to promote, adopt, and implement zero emissions technologies across the District, including at the shipyards. It should also be noted that BAE Systems has purchased an 18,000- pound capacity electric forklift that is scheduled to be delivered in 2022. The new, electric forklift will replace a similar capacity diesel powered forklift that will be retired.

Community Emissions Reduction Plan (CERP)

The Portside Community's⁴ Community Emissions Reduction Plan was adopted by the San Diego Air Pollution Control District (SDAPCD) on July 16, 2021, and CARB on October 14, 2021. The CERP itself notes that it "is a plan for action to reduce air pollutant emissions and community exposure to those emissions in the Portside Community." The CERP specifies "aspirational goals" and a variety of actions, and identifies entities (governmental or organization) responsible for implementation of the action. The goals in the CERP are aspirational and are intended to guide the community members. businesses, organizations, and government agencies partnering in the implementation of this CERP to support health and environmental justice in the Portside Community. While there might not be a clear path to reach some of these goals, the goals identify the direction in which the community wants to go to achieve emission reductions beyond regulatory requirements. As technology evolves and data continues to be collected, the goals in the CERP may be adjusted. Although the District's participation in the CERP and its implementation is important, a significant majority of the CERP's goals and actions, as enumerated, are not applicable to the District (or proposed to be implemented by the District). For instance, a substantial component of the CERP is premised on future regulatory or policy action by the SDAPCD (and CARB) and expanding and evolving its enforcement program to increase compliance rates, increase outreach efforts, and maximize compliance (see Chapters 5 and <u>6 of the CERP).⁵ To provide full public disclosure and informed participation, the Final EIR includes</u> an analysis of whether the proposed project would conflict with or obstruct implementation of the CERP. The analysis focuses on those CERP goals and actions that are applicable to the District.

BAE Systems proposed a project design feature, which will be in the form of a coastal development permit condition, to implement measures that achieve a minimum reduction of 20% of the DPM emissions from construction activities as analyzed and projected within the EIR. This 20% reduction was **not** assumed in the EIR's air quality analysis, which concluded that the proposed project would not produce emissions that would exceed any applicable thresholds of significance. The 20% reduction was likewise not considered in the conflict analysis included here. Thus, the analysis below is conservative and, even without the inclusion of BAE's voluntary commitment to reduce construction DPM emissions by a minimum 20%, the project would not conflict with or otherwise obstruct implementation of the CERP, and no physical environmental impacts would result.⁶

Based on the proposed Project Description (Chapter 3 of Draft EIR) and Environmental Setting (Chapter 2 of Draft EIR), the following table discusses the proposed project's conflicts with or obstruction of implementation of the goals and objectives and strategies of the CERP so that the public and Board of Port Commissioners have complete and accurate information regarding the proposed project's likely near-term and long-term impacts, if any. Merely being inconsistent with a CERP goal, objective, or strategy would not necessarily be considered a significant impact under

⁴ The Portside Environmental Justice Neighborhoods (Portside Community) generally includes Barrio Logan, Logan Heights and Sherman Heights in the City of San Diego and West National City in the City of National City. More specifically, it includes the following 12 census tracts: 6073005000, 6073004900, 6073003902, 6073003601, 6073003901, 6073005100, 6073003603, 6073004000, 6073003502, 6073021900, 6073004700, and 6073011602.

⁵ In fact, consistent with the CERP, on November 4, 2021, the SDAPCD updated Rule 1210 to lower the health risk threshold from 100 per million to 10 per million.

⁶ The 2018 update to the State CEQA Guidelines makes clear that analysis of a project's consistency with applicable plans should not just be on conflicts with the plan but *whether a conflict could result in a significant physical impact*. The conflict itself is not an impact.

<u>CEQA</u>; rather, the inconsistency must result in a substantial adverse effect on the environment. No inconsistencies have been identified that would result in a significant impact on the environment.

Table 4.1-6d. Community Emissions Reduction Program Conflict Analysis

Community Emissions Reduction Plan	Proposed Project Consistency
Overall Goals	
GOAL 1. By 2031, reduce Diesel PM from 2018 levels by 80% in ambient air at all Portside Community locations.	Consistent. The proposed project would result in the annual DPM reduction of 15–29% from operation activities, which is on the trajectory to assist in meeting the 80% reduction goal by 2031. 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). Notwithstanding that the proposed project would reduce operational emissions, a proposed project that theoretically results in increased emissions would not necessarily obstruct attainment of Goal 1 because, as noted above, specific future action to achieve Goal 1 may be through a variety of future means. For instance, BAE Systems has reduced emissions from its operations through implementation of a variety of measures, including the purchase of new equipment. BAE expects to continue to make such advancements.
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 proposed project complies with all applicable laws, regulations, and policies pertaining to air quality emissions and is a series of 15 discrete construction activities both in water and on land that does not involve medium- or heavy-duty trucks servicing the Portside Community. The proposed project is not in conflict 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 proposed project can meet as vet 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 proposed project is not in conflict with and does not obstruct SDAPCD staff from establishing HD/MD ZEV truck charging infrastructure. The SDAPCD and/or other entities may pursue and establish charging infrastructure, in strategic locations, designed to facilitate the use of ZE trucks.
GOAL 4. Reduce emissions from HD/MD trucks servicing indirect sources by 100% 5 years in advance of regulatory requirements.	Not Applicable. The proposed project is in compliance with all applicable laws, regulations, and policies pertaining to air quality emissions and is a series of 15 discrete construction activities both in water and on land that does not involve medium or heavy-duty trucks servicing indirect sources of emissions within the Portside Community.

<u>Community Emissions Reduction Plan</u>	Proposed Project Consistency
	The proposed project is not in conflict with and does not obstruct CARB from developing and implementing emission reduction requirements for medium and heavy-duty trucks serving indirect source emissions; until such requirements are established with a time- certain implementation date, it cannot be determined if and when the proposed project can meet as-yet-defined requirements.
GOAL 5. By December 2021, APCD to	Not Applicable. The proposed project is not in conflict
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.	with and does not obstruct SDAPCD staff from presenting the cumulative cancer risk for Portside <u>Communities from Health Risk Assessments and</u> <u>modeling of cumulative risk.</u>
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 project is not in conflict with and does not obstruct SDAPCD staff from establishing an estimated cancer risk reduction goal.
GOAL 7. Conduct a Health Risk	Goal 7 Not Applicable. The proposed project is not
<u>Assessment (HRA) at the Port's two</u>	located at the Port's marine terminals.
updated baseline that relies on the most	Priority 2) Not Applicable. The proposed project is not located at the Port's marine terminals.
recent source characterization and activity from the Port's 2019 Emissions Inventory to inform aspirational goals in support of public health community priorities:	Priority 2) a. Not Applicable. The proposed project is not in conflict with and does not obstruct SDAPCD staff from developing an aspirational goal to reduce cancer risk.
2) By October 2021, identify existing	Priority 2) b. Not Applicable. The proposed project is
Port's Tenth Avenue Marine Terminal	not in conflict with and does not obstruct SDAPCD staff
(TAMT) and the National City Marine	emissions.
<u>Terminal (NCMT) for Diesel Particulate</u> Matter (DPM) and other Toxic Air	Priority 2) c. Not Applicable. The proposed project is
<u>Contaminant (TAC) emissions.</u>	not in conflict with and does not obstruct SDAPCD staff
a. Reduce Health Risk: The HRA may be	goal.
used to inform an aspirational goal of reducing cancer risk	Priority 2) c. Not Applicable. The proposed project is
b. Reduce DPM Emissions: The HRA may	not in conflict with and does not obstruct District staff
be used to inform an aspirational	<u>cumulative cancer risk analysis.</u>
C Assist the San Diego Air Pollution	-
<u>Control District (SDAPCD) and the</u>	
<u>California Air Resources Board (CARB)</u>	

Community Emissions Reduction Plan	Proposed Project Consistency
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.	
GOAL 8. By 2026 reduce cancer risk below 10/million for each permitted stationary source, including portable equipment, in the Portside Environmental Justice Community.	Consistent. The proposed project would generate emissions from project construction activities. The HRA prepared for the proposed project concluded that construction activities would result in a risk value of 0.78 case per million, which is far below 10 cases per million. Moreover, as discussed in the EIR, the proposed project would increase operational efficiencies and result in reduced emissions. The project would not conflict with or obstruct implementation of Goal 8.
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 proposed project is not in conflict with and does not obstruct completion of Harbor Drive 2.0 improvements; the proposed project site is not located in National City.
GOAL 10. By 2031 increase tree canopy in the Portside Community to 35%.	Not Applicable. The proposed project is not in conflict with and does not obstruct the SDAPCD, City of San Diego, National City and stakeholders from increasing the tree canopy of Portside Communities; the proposed project is 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 project is not in conflict 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.	Consistent. BAE Systems has implemented, and continues to implement, emissions-reduction technologies throughout its leasehold. BAE Systems uses electric cars and an all-electric truck, and has installed a heavy-duty vehicle charging station, replaced diesel fuel forklifts with propane forklifts, and electrified the Pride of San Diego dry dock for docking and undocking evolutions (completed in 2016). The proposed project would not conflict 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.	Consistent. Trucks over 5 tons are required to follow the designated Truck Route along Harbor Drive to access north or southbound Interstate 5 or northbound Interstate 15, as adopted on October 31, 2018, by City of

Community Emissions Reduction Plan	Proposed Project Consistency
	<u>Truck Route to further emphasize and improve</u> compliance with the designated trucking route.
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.	Consistent. BAE Systems uses electric cars and an all- electric truck and has installed a heavy-duty vehicle charging station within its leasehold.
Land Use Strategies	
Action F3: Urban Greening.	Not Applicable. The proposed project is not in conflict with and does not obstruct City of National City, City of San Diego, SANDAG, U.S. Navy, District, Caltrans, or the Barrio Logan Community Planning Group from promoting programs, projects, and funding opportunities to increase urban greening efforts.
<u>Action F5: Support Harbor Drive</u> <u>Multimodal Corridor Study (HDMCS) Land</u> <u>Use Proposals.</u>	Not Applicable. The proposed project is not in conflict with and does not obstruct the City of San Diego. District, 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 proposed project is not in conflict with and does not obstruct SDAPCD, SANDAG, Naval Base San Diego, the District. 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 (District, Navy, and Shipyards)

Action G2: Reduce Emissions from Ships at Berth.

Consistent. When vessels berth or dock at BAE Systems
for repairs, upgrades, and maintenance, their engines
are off. Portable diesel engines and portable fire pumps
(for fire protection) are placed on board the ships to
supplement the vessels' power needs and to ensure safe
movement within the berthing area. The reduction in
<u>annual vessel calls would decrease portable diesel</u>
engine and fire pump activity, thereby reducing
<u>emissions.</u>
The vessels used for hoteling sailors (living barges) are
all plugged in directly to shore power. There are no
<u>engines on these vessels and they are towed into place.</u>
<u>BAE Systems provides all services such as water and</u>
<u>sewer.</u>
The proposed project is not in conflict with and does not
obstruct the District from advancing implementation of
snore power intrastructure and/or alternative
technology to reduce ocean-going vessel emissions.

Community Emissions Reduction Plan	Proposed Project Consistency
Action G4: Reduce DPM and NOv	Consistent . When vessels berth or dock at BAE Systems
emissions from portable air compressors and other diesel sources at shipyards.	for repairs, upgrades, and maintenance, their engines are off. Portable diesel engines and portable fire pumps (for fire protection) are placed on board the ships to supplement the vessels' power needs and to ensure safe movement within the berthing area. The reduction in annual vessel calls would decrease portable diesel engine and fire pump activity, thereby reducing emissions.
	The vessels used for hoteling sailors (living barges) are all plugged in directly to shore power. There are no engines on these vessels and they are towed into place. BAE Systems provides all services such as water and sewer. The proposed project is not in conflict with and does not obstruct the District from advancing implementation of shore power infrastructure and (or alternative
	technology to reduce ocean-going vessel emissions.
Action G5: Promote best practices for reducing diesel, VOC and other emissions from ship repair activities.	Consistent. BAE Systems is required by CARB to report criteria pollutant emissions from activities per the Air Toxics "Hot Spots" Program at least every 4 years (SDAPCD 2019b). A summary of criteria pollutant reporting for the previous two reporting timeframes is provided in Table 4.1-3. Activity at BAE Systems ship repair yard that generates emissions includes exhaust associated with equipment used within the BAE Systems leasehold (e.g., generators, loaders, forklifts) as well as process-related emissions from welding, painting, blasting, and any other activities related to ship repair. Overall, the Air Toxics "Hot Spots" Program has dramatically reduced emissions both locally and across the state, with the most significant reductions due to the use of "green" solvents and improved equipment controls of heavy metal emissions (SDAPCD 2019b). The proposed project would avoid 20% of all construction emissions, and, once implemented, energiane used d americane a 15 – 200(reductions in
	<u>DPM emissions annually.</u>
Action G6: Reduce emissions from shipyard employee transportation	Consistent. The proposed project has been conditioned with Mitigation Measure GHG-2 (MM-GHG-2), which among other things requires BAE Systems to implement a Transportation Demand Management (TDM) Plan during construction that includes elements such as the promotion of ride sharing and carpooling, restricts PM peak-hour trips, and provides subsidized transit passes for construction workers to reduce worker trips and parking demand. From an operational perspective, the proposed project is likely to reduce the total number of employees accessing the project site.

Community Emissions Reduction Plan	Proposed Project Consistency
Action G7: Promote adoption of ZE technologies by Port tenants, truckers, and other users of equipment	Consistent. The proposed project is conditioned within the Coastal Development Permit to avoid 20% of DPM emissions from construction activities, which is beyond existing thresholds of emission significance. The 20% reduction will primarily be achieved by contracting the cleanest powered/operating construction equipment. Through these procurement efforts, a strong signal will be sent to the construction industry that the time has come for them to transition their diesel-powered equipment to cleaner technology, regardless of existing laws, rules, or regulations at the federal, state, regional and local levels. Even without such a requirement, the proposed project would not conflict with or obstruct the District's ability to promote adoption of ZE technologies as such technologies become feasible and available.
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 project is conditioned within the Coastal Development Permit to avoid 20% of DPM emissions from construction activities. The 20% reduction will primarily be achieved by contracting the cleanest powered/operating construction equipment. These procurement efforts will help accelerate the transition of zero/near-zero emission construction trucks and equipment by signaling to the construction industry that diesel-powered operations that occur on District Tidelands must begin to transition to cleaner technology, regardless of existing laws, rules, or regulations at the federal, state, regional, and local levels. Even without such a requirement, the proposed project would not conflict with or obstruct the District's ability to promote adoption of ZE technologies as such technologies become feasible and available.

4.2.4 Changes to Section 4.2, Biological Resources

Section 4.2.4.3

Pages 4.2-28 and 4.2-29

Impact-BIO-2: Potential Disturbance or Destruction of Nests Protected by the Migratory Bird Treaty Act and California Fish and Game Code. Demolition of structures and noise from construction activity could impede the use of bird nesting sites during the nesting season (February 15 through August 31September 30). The destruction of an occupied nest or disturbance to nesting activity would be considered a significant impact in violation of the MBTA or California Fish and Game Code. Therefore, this impact would be potentially significant.

....

MM-BIO-2: Avoid Nesting Season for Birds or Conduct Preconstruction Nesting Surveys. To ensure compliance with the MBTA and similar provisions under Sections 3503 and 3503.5 of the California Fish and Game Code, the project proponent shall conduct all construction activities between September October 1 and February 14 (i.e., outside the nesting season) to the extent feasible. If construction activities are scheduled between February 15 and August 31September 30, the project proponent shall implement the following during construction:[...]

Pages 4.2-33 and 4.2-34

Marine

As discussed in Section 4.2.2, Existing Conditions, eelgrass habitat is present along the base of the riprap revetment and bulkhead wall to approximately -12 feet mean lower low water (MLLW)."The proposed project would directly impact result in the removal (via dredging) of approximately 2,004 square feet of eelgrass habitat (Appendix D-1). However, this eelgrass located within the project site is regrowth following implementation of the recent San Diego Shipyard Sediment Remediation Project (SCH #2009111098), which resulted in impacts on this eelgrass within the project site from remediation activities, including dredging and placement of sand or gravelly sand cover. The eelgrass removed as a result of the Shipyard Sediment Remediation Project, and thus the impact created by removal of eelgrass growth at that location, has already been identified and mitigated for through the establishment of an eelgrass mitigation site at the South Bay Eelgrass Mitigation Site (Appendix D-1). Because eelgrass impacts associated with removal of this eelgrass have already been mitigated through the establishment of eelgrass growth at the South Bay Eelgrass Mitigation Site, no new mitigation beyond that already provided at the South Bay Eelgrass Mitigation Site is required for this specific impact (loss of regrowth eelgrass), which has already been mitigated. Consequently, impacts on existing regrowth eelgrass within the project site as a result of dredging would be considered less than significant, and no mitigation would be required. For these same reasons, any indirect impacts on existing regrowth eelgrass within the project site from in-water construction activities, such as shading from construction equipment and increased turbidity, would be less than significant and therefore would not require mitigation.

Although direct and indirect impacts on existing regrowth eelgrass within the project site are considered less than significant, there are potential indirect impacts on the new growth eelgrass beds within the project site that extend beyond the spatial distribution of the eelgrass that was previously removed and mitigated for offsite as part of the San Diego Shipyard Sediment Remediation Project.are present outside of the project site to the south of the proposed Quay Wall Modifications (Project Element 7). The removal of riprap, dredging, and installation of sheet piles can have impacts on the eelgrass beds adjacent to the project's southern shoreline in three ways: direct physical disturbance from anchoring and staging of equipment, Project Element 2 would introduce slight additional cover over a non-regrowth eelgrass bed through modifications to the Pride of San Diego Drydock Wharf Replacement and Realignment. However, consistent with the CEMP, the new overwater structure, and any additional cover over non-regrowth eelgrass (approximately a 100-square-foot area) is considered a potential indirect impact. Likewise, any increase in cover over non-regrowth eelgrass associated with Project Element 9 is considered a potential indirect impact. Implementation of MM-BIO-5, which requires compliance with the CEMP and post-construction eelgrass monitoring, would ensure any reduction in eelgrass resulting from increased cover would be mitigated to a less-than-significant level.

<u>Also, in-water construction activities for Project Elements 1 through 9 can have</u> indirect impacts <u>on</u> <u>the new growth eelgrass beds</u> associated with shading from construction-related equipment, and <u>indirect impacts associated with or</u> elevated turbidity levels from construction-related activities

such as dredging, which impair water quality through increased turbidity from suspension of sediment (**Impact-BIO-5**). To reduce potential direct and indirect impacts on <u>new growth</u> eelgrass <u>beds withinadjacent to</u> the project site, mitigation measure **MM-BIO-5** requires implementation of eelgrass protection measures during <u>all</u> waterside construction activities <u>for Project Elements 1</u> <u>through 9</u>, such as pre- and post-construction surveys in accordance with the CEMP and installation of turbidity curtains. Implementation of **MM-BIO-5** would reduce potential <u>indirect</u> impacts on <u>new growth</u> eelgrass within the project site does not require mitigation because it has been previously mitigated for through establishment of the South Bay Eelgrass Mitigation Site. Therefore, **MM-BIO-5** would not be required for any <u>regrowth</u> eelgrass that would be impacted within the project site.

Pages 4.2-37 and 4.2-38

Level of Significance Prior to Mitigation

Implementation of the proposed project would have a substantial adverse effect, either directly or through habitat modifications, on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW, NMFS, or USFWS. Potentially significant impacts include the following.

Impact-BIO-4, as discussed under Threshold 1 above.

Impact-BIO-5: Potential Water Quality Impairment or Construction-Related Impacts on Eelgrass. Impacts on <u>regrowth</u> eelgrass within the project boundaries were previously mitigated offsite, and so project-related impacts on <u>regrowth</u> eelgrass within the project boundaries are less than significant. However, there are <u>new growth</u> eelgrass beds <u>within the</u> <u>project site that extend beyond the spatial distribution of the eelgrass that was previously</u> <u>removed and mitigated for offsite</u><u>immediately</u> <u>adjacent to the proposed Quay Wall Modifications</u> (Project Element 7) at the south end of the property. Eelgrass beyond the BAE Systems <u>leaseholdthat</u> was not part of the prior mitigation and-could be impacted through shading or increases in turbidity associated with bottom disturbance during <u>in-water construction</u> <u>activities for Project Elements 1 through 9dredging of riprap and sediment or during driving of</u> sheet pile. Suspended sediments cause turbidity that reduces light penetration through the water. When suspended sediment resettle, they can settle directly on eelgrass. Both of these mechanisms reduce the plant's ability to photosynthesize and therefore can lead to reductions in bed density and cover. Moreover, if contractors stage vessels over the <u>new growth</u> eelgrass beds-adjacent to the project boundaries, impacts can occur through contact or shading.

Mitigation Measures

For Impact-BIO-4:

Implement MM-BIO-4, as discussed under Threshold 1 above.

For Impact-BIO-5:

MM-BIO-5: Implement Eelgrass Protection Measures <u>and CEMP Compliance</u>. Prior to commencing <u>in-water</u> construction activities for Project Elements <u>1 through 97 (Quay Wall Modifications</u>), the project proponent shall implement the following measures to ensure protection of eelgrass bedslocated immediately south of the proposed Quay Wall Modifications.

- Adhere to the Clean Water Act Section 404 permitting process and ensure California Eelgrass Mitigation Policy compliance through the Section 404 permit and coordination with the National Marine Fisheries Service.
- Perform a preconstruction eelgrass survey in accordance with the California Eelgrass Mitigation Policy.
- Temporarily install a silt curtain to contain turbidity during <u>all in-water construction</u> <u>activities for Project Elements 1 through 9dredging of rock, dredging of sediment, and</u> <u>installation of sheet pile during quay wall modifications</u>.
- Provide results of the preconstruction eelgrass survey during a contractor education meeting and instruct the contractor not to contact the bottom or stage vessels over eelgrass vegetated areas and instruct that the use of a silt curtain is necessary during <u>all in-water</u> <u>construction activities for Project Elements 1 through 9quay wall modifications</u>.
- Perform a post-construction eelgrass survey in accordance with the California Eelgrass Mitigation Policy to validate protection of adjacent eelgrass beds following construction. In the event that unforeseen impacts to eelgrass occur, those impacts would be mitigated by increasing the amount of restoration or withdrawal of eelgrass mitigation bank credits as specified under **MM-BIO-4**, subsection 2.B, or as may be otherwise required by applicable regulatory agencies to ensure CEMP compliance, and utilizing the methods and standards as may be required by the regulatory agencies.

Level of Significance after Mitigation

Implementation of **MM-BIO-4** would reduce impacts on foraging opportunities for sensitive avian species and nearshore marine habitat (**Impact-BIO-4**) to less-than-significant levels by requiring implementation of any combination of the following mitigation options: removing overwater coverage in the San Diego Bay; creating or restoring eelgrass habitat at a suitable mitigation site of equivalent size and value within San Diego Bay; purchasing credits for a suitable in lieu fee program or mitigation bank; and/or purchasing credits from the District's shading credit program. Implementation of **MM-BIO-5** would reduce **Impact-BIO-5** to less than significant by requiring preand post-construction eelgrass surveys in accordance with the CEMP, silt curtains to contain any construction-generated turbidity, educating contractors on the presence of nearby eelgrass so that direct contact can be avoided, performing monitoring to ensure that adjacent <u>new</u> growth eelgrass is not impacted, and, in the event <u>new growth</u> eelgrass is impacted, requiring restoration, creation, or purchase of eelgrass mitigation bank credits in accordance with **MM-BIO-4**, <u>or as may be otherwise required by applicable regulatory agencies to ensure CEMP compliance, and utilizing the methods and standards as may be required by the regulatory agencies.</u>

4.2.5 Changes to Section 4.3, Greenhouse Gas Emissions and Energy

Section 4.3.4.3

Page 4.3-23

Table 4.3-8. Consistency with Applicable District CAP Measures for 2020

Waste F	Reduction and Recycling	
SW1	Increase the diversion of solid waste from landfill disposal.	Consistent (After Mitigation) . MM-GHG-2 requires the project proponent to use recycled, regional, and rapidly renewable materials where appropriate. In addition, the measure requires compliance with AB 341 and AB 939 (i.e., <u>implementing a recycling</u> program to support the statewide goal of diverting <u>75% of solid waste by 2020recycling 75% of solid</u> waste and recycling 65% of all construction and demolition debris), the City of San Diego Construction and Demolition Debris Deposit Ordinance, and the City of San Diego Recycling Ordinance.
SW2	Adopt a Construction and Demolition Recycling Ordinance.	Consistent (After Mitigation). MM-GHG-2 requires the project to <u>comply with the City of San Diego</u> <u>Construction and Demolition Debris Deposit</u> <u>Ordinance and</u> divert construction and demolition debris from disposal in landfills and incineration facilities by 65%. Construction will use recycled, regional, and rapidly renewable materials where appropriate.
SW3	Develop policy to reduce the generation of solid waste.	Consistent (After Mitigation) . Consistent with MM-GHG-2 , the project proponent will <u>be</u> required to compl <u>viance</u> with <u>AB 939</u> , which requires recycling 50% of solid waste and diverting 65% of all construction and demolition debris <u>AB 341</u> , which requires commercial entities to implement recycling programs to support the statewide goal of diverting 75% of solid waste from landfills by 2020; and the City of San Diego Construction and Demolition Debris Deposit Ordinance and Recycling Ordinance.

Section 4.3.4.3

Pages 4.3-27 and 4.3-28

MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures. As a condition of all discretionary actions and/or Coastal Development Permits, the project proponent shall be required to implement the following measures to be consistent with the Climate Action Plan:

- A. Reduce indoor water consumption to 20 percent lower than baseline buildings (defined by Leadership in Energy and Environmental Design [LEED] as indoor water use after meeting Energy Policy Act of 1992 fixture performance requirements) through use of low-flow fixtures in all administrative and common-area bathrooms.
- B. Comply with AB 939 AB 341, the City of San Diego Construction and Demolition Debris Deposit Ordinance, and the City of San Diego Recycling Ordinance. This shall be mandatory and include recycling at least 50 percent of solid waste; compliance with the City of San Diego Construction and Demolition Debris Deposit Ordinance shall be mandatory and include implementing a recycling program to support the statewide goal of diverting 75 percent of solid waste from landfills by 2020 in accordance with AB 341. recycling at least 65 percent of all construction and

demolition debris. This measure shall be applied during construction and operation of the proposed project.[...]

4.2.6 Changes to Section 4.4 Hazards and Hazardous Materials

Section 4.4.4.3

Pages 4.4-33 and 4.4-34

MM-HAZ-1: Implement a (Landside) Soil and Groundwater Management Program. The project proponent shall retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer (licensed professional) with experience in contaminated site redevelopment and restoration to oversee the implementation of a *Soil and Groundwater Management Program*, which must be approved by the District. The Soil and Groundwater Management Program will be implemented prior to and throughout the duration of landside construction activities for the proposed project. Each of the elements included in the Soil and Groundwater Management Program shall include the following elements, each of which have specific timing mechanisms as identified in the description of each element below:

....

C. A *Soil and Groundwater Disposal Plan (Disposal Plan)* shall be prepared following the Testing and Profiling Plan, which shall describe the process for excavating, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. The Disposal Plan shall be prepared in accordance with the Testing and Profiling Plan and shall adhere to applicable regulatory requirements and standards, including CA Title 22 Division 4.5, and DOT Title 40 CFR Part 263, CAC Title 27, and ensure compliance with applicable regulations for the disturbance, handling of contaminated materials, prevention of cross contamination, spills, or releases, such as segregation into separate piles for waste profile analysis based on organic vapor, and visual and odor monitoring. All excavation activities shall be actively monitored for the potential presence of contaminated soils and for compliance with the Disposal Plan. If disposal of contaminated soils or groundwater is required, it shall be done under the oversight of the County of San Diego Department of Environmental Health, which oversees hazardous materials issues in San Diego County.

Page 4.4-35

MM-HAZ-2: Implement a Dredging Management Program. The project proponent shall implement a Dredging Management Program (DMP) that complies with applicable permit requirements, including the Section 404 permit and the Section 401 water quality certification. The DMP shall be implemented prior to, during, and upon completion of dredging activities for the proposed project. A clamshell dredger shall be used for all project dredging activities. The DMP shall contain the following elements, each of which have specific timing mechanisms as identified in the description of each element below:[...]

4.2.7 Figure Revisions

Figures ES-7 and 3-7 have been revised since public review of the Draft EIR to reflect engineering design refinements to the dredging footprint for Project Element 4. These revised figures are provided as Figures ES-7a, b, and c and 3-7a, b, and c.

5.1 Introduction

The Draft Environmental Impact Report (EIR) was available for public review for 49 days beginning on December 13, 2017 and ending on January 30, 2018. The San Diego Unified Port District (District) posted an electronic version of the Draft EIR on the District's website; hard copies were sent to the City of San Diego Central Library; and a hard copy was available for review at the District's Administration Building at 3165 Pacific Highway, San Diego, CA 92101. A Notice of Availability was posted with the County Clerk on December 13, 2017, posted on the District's website, and mailed to various agencies, organizations, individuals, and known interested parties. All requisite documents, including the Notice of Completion form, were sent to the State Clearinghouse on December 13, 2017.

5.2 Comments Received on the Draft EIR

The District received comment letters from 13 commenters on the Draft EIR during the public review period. Topics included aesthetics and visual resources, air quality and health risks, biological resources, cultural resources, geology and soils, greenhouse gas (GHG) emissions and climate change, hazards and hazardous materials, hydrology and water quality, land use and planning, public services and recreation, transportation, circulation and parking, and utilities and energy use. Table 5-1 lists the agencies, organizations, and interested parties that provided comment letters. Each comment letter is assigned a letter (e.g., Comment Letter A) and each issue that was raised within each comment letter has been assigned a consecutive number that corresponds to a response number (e.g., Response to Comment A-1).

Letter	Agency/Organization	Dated	Page
А	California Department of Fish and Wildlife	08/18/2020	5-2
В	City of San Diego Planning Department	08/17/2020	5-31
С	County of San Diego Department of Environmental Health	08/17/2020	5-51
D	San Diego County Regional Airport Authority	07/08/2020	5-54
Е	Environmental Health Coalition	08/17/2020	5-58
F	Barrio Logan Planning Group	08/20/2020	5-72
G	San Diego Military Advisory Council	07/20/2020	5-75

 Table 5-1. Agencies, Organizations, and Interested Parties that Submitted Comment Letters on the Draft EIR

5.3 Comment Letters and Responses

5.3.1 Comment Letter A: California Department of Fish and Wildlife



State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE Marine Region 1933 Cliff Drive, Suite 9 Santa Barbara, CA 93109 www.wildlife.ca.gov GAVIN NEWSOM, Governor CHARLTON H. BONHAM, Director

Comment Letter A

August 18, 2020

Peter Eichar Senior Planner, Development Services San Diego Unified Port District P.O Box 120488 San Diego, CA 92112 peichar@portofsandiego.org

Dear Mr. Eichar:

BAE SYSTEMS WATERFRONT IMPROVEMENT PROJECT (PROJECT) DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) SCH# 201039040

The California Department of Fish and Wildlife (Department) received a Draft Environmental Impact Report (DEIR) for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹ The Department previously submitted comments in response to the Notice of Preparation.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that the Department, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

A-1

The Department is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the state [Fish & G. Code, Section 711.7, subd. (a) & 1802; Pub. Resources Code, Section 21070; CEQA Guidelines Section 15386, subd. (a).] The Department, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, Section 1802.). Similarly, for purposes of CEQA, the Department is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. The Department is also responsible for marine biodiversity protection under the Marine Life Protection Act in coastal marine waters of California and ensuring fisheries are sustainably managed under the Marine Life Management Act. Pursuant to our jurisdiction, the Department has the following comments and recommendations reagrificant projects.

Response to Comment A-1

The comment is an introductory comment indicating that the California Department of Fish and Wildlife (CDFW) received the Draft EIR. The comment notes that CDFW previously provided comments on the Notice of Preparation (NOP). The comment states that CDFW appreciates the opportunity to provide comments and recommendations on the Draft EIR. The comment also states that CDFW is California's Trustee Agency for fish and wildlife resources. The comment summarizes CDFW's role and jurisdiction under the Fish and Game Code, CEQA, Marine Life Protection Act, and Marine Life Management Act, and that CDFW is providing comments and recommendations pursuant to its jurisdiction.

The District appreciates CDFW's interest in the proposed project. This comment is an introductory comment and does not raise any environmental issues requiring a response pursuant to CEQA. The specific comments raised following this introduction are listed separately, along with the District's individual responses.

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Peter Eichar, Senior Planner San Diego Unified Port District August 18, 2020 Page 2

PROJECT DESCRIPTION SUMMARY

Proponent: BAE Systems San Diego Ship Repair, Inc Objective: The objective of the Project is to conduct facility maintenance, repair and replacement of waterfront wharf and infrastructure associated with dry-dock, mooring, and operational facilities at the BAE Systems San Diego Ship Repair Yard. The Project

A-2 consists of 15 distinct project elements that are designed to improve the functionality of the existing facility. Project elements include dredging, replacement and installation of mooring dolphins, mooring float replacement, drydock wharf replacement, fender system repair and replacement, installation of pier piles including submerged sheet piles, and additional on-land construction components.

Location: Eastern shore of central San Diego Bay, 2205 E Belt St, San Diego, CA 92113 Timeframe: Construction is anticipated to begin in June 2021 and end in March 2026.

BIOLOGICAL SIGNIFICANCE

San Diego Bay includes diverse shallow habitats and ecosystems within the intertidal and subtidal areas that provide important habitat and forage for a variety of resident and migratory seabirds, shorebirds, sea turtles, marine mammals, fish and invertebrate

A-3 species. Some of these species are unique to southern California and San Diego Bay. Important San Diego Bay habitats include eelgrass beds, sandy intertidal, mud flats, tidal wetlands, salt marsh, and subtidal areas. The diverse habitats within San Diego Bay also support both commercial and recreational fisheries that are important to California's coastal economy.

COMMENTS AND RECOMMENDATIONS

A-4 The Department offers the comments and recommendations below to assist the BAE Systems in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife resources.

I. California Endangered Species Act (CESA) Listed Species

CDFW has regulatory authority over projects that could result in the "take" of any species listed by the State as threatened or endangered, or designated as a candidate for listing, pursuant to Fish and Game Code Section 2081. Species that occur in the Project area and are protected under the CESA include:

A-5 California least tern (*Sterna antillarum browni*), State and Federally Endangered, State Fully Protected

II. Fully Listed Species Fish and Game Code, Section 5155

The Department has jurisdiction over fully protected species pursuant to Fish and Game Code Sections 3511, 4700, 5050, and 5515. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for

Response to Comment A-2

The comment summarizes the description of the proposed project, including the project proponent, objective of the project, location, and timeframe for implementation.

This comment restates information from the Draft EIR related to the project description but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment A-3

The comment describes the habitats and ecosystems of San Diego Bay and notes that these habitats also support commercial and recreational fisheries important to California's coastal economy.

This comment provides background information on the biological significance of San Diego Bay but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment A-4

The comment states that CDFW is providing comments and recommendations to assist in adequately identifying and/or mitigating the project's significant or potentially significant impacts.

This comment indicates that comments are to follow but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. The specific comments raised following this comment are listed separately, along with the District's individual responses.

Response to Comment A-5

The comment states that CDFW has regulatory authority over projects that could result in take of species under the California Endangered Species Act (CESA) and identifies the CESA-protected species in the project area, which includes the California least tern. The comment also

states that CDFW has jurisdiction over fully protected species pursuant to the Fish and Game Code and identifies the fully protected marine species in the project area, which includes the California brown pelican.

This comment provides background information on the state-protected species in the project area but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Peter Eichar, Senior Planner San Diego Unified Port District August 18, 2020 Page 3

collecting these species for necessary scientific research on the species and certain relocation situations. Therefore, take of any fully protected animal species is prohibited and must be avoided by the Project. Fully protected marine species in the Project area include:

A-5 cont

California brown pelican (*Pelecanus occidentalis californicus*), State Fully Protected Species (FPS)

III. Project Level Impacts

The Project as proposed in the DEIR will result in impacts to the marine environment within and adjacent to the Project site by both in-water construction and adjacent activities. Dredging, pile driving, equipment storage, barge operations, and an expanded wharf will result in impacts to in-water noise levels, water quality, open water habitat, and benthic habitat. Dredging impacts are projected to result in 108,600 cubic yards of sediment

A-6 Induct. Dreaging impacts are projected to result in Too, soor clubic yards of sediment removal and 2,004 square feet of eelgrass habitat loss. Habitat impacts will occur from the conversion of soft bottom subtidal to deep-water subtidal habitat, sediment disturbance with resuspension of contaminants causing turbidity, and sedimentation resulting in smothering of marine algae and sedentary benthic invertebrates. Additional habitat and species impacts will occur from the installation of 242 concrete and steel piles and 25 sheet piles from the wharf expansion.

Comment 1 - Eelgrass:

Comment: Native eelgrass beds (*Zostera marina*) are an important part of the San Diego Bay ecosystem and are recognized by state and federal statutes as both highly valuable and sensitive habitats. Eelgrass provides primary production, nutrients, spawning, foraging, and nursery habitat for fish and other species. Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSA), eelgrass is designated as Essential Fish Habitat (EFH) for multiple federally managed fish species as well as a

A-7 habitat area of particular concern (HAPC). Eelgrass habitats are further protected under state and federal "no-net-loss" policies for wetland habitats. Eelgrass will be directly and indirectly impacted by dredging, sedimentation, shading, and pile installation within and adjacent to the proposed Project footprint. These impacts have not been adequately addressed within the DEIR and instead are proposed to be identified and monitored during eelgrass surveys pre- and post-construction. The Department is concerned that no mitigation is identified for the loss of 2,004 square foot of eelgrass loss anticipated due to dredging.

The DEIR states that impacts to eelgrass within the Project boundaries were addressed through the Shipyard Sediment Remediation Project eelgrass mitigation (Shipyard Sediment Remediation (dredging) Project; SCH# 200911098). According to the DEIR, the Shipyard Sediment Remediation Project was completed in 2015 and resulted in 0.5 to 0.8

A-8 acres of impacts to eelgrass habitat and was mitigated for at the South Bay Eelgrass Mitigation Site. However, the details of the 2015 Remediation project such as final mitigation acreages, mitigation ratios, success of the mitigation and justification as to how it is applicable to the proposed current Project impacts are not included in the DEIR that concludes that no eelgrass mitigation is required as per the California Eelgrass Mitigation

Response to Comment A-6

The comment summarizes the impact analysis and conclusions from the Draft EIR related to biological resources.

This comment restates the analysis and conclusions from the Draft EIR but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment. The commenter is also referred to the response to comment A-7, which provides project clarifications and explains how the proposed project will not result in either significant direct or indirect impacts on eelgrass.

Response to Comment A-7

The comment provides a description of eelgrass and its habitat functions. The comment also notes that eelgrass is designated as Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act and that it is further protected under state and federal no net loss policies. The comment suggests that the proposed project would result in direct and indirect impacts on eelgrass and that eelgrass impacts have not been adequately addressed in the Draft EIR. The comment expresses concern that no mitigation is identified for the loss of 2,004 square feet of eelgrass due to dredging.

The commenter suggests that the proposed project would result in direct impacts on eelgrass. As detailed in Section 4.2. *Biological Resources*, of the Draft EIR, the proposed project would result in the removal of eelgrass within the project footprint from dredging activities for Project Element 4 (Pier 3 South Nearshore Dredging). It should be noted that a conceptual dredge plan for Project Element 4 was presented in the Draft EIR (Figures ES-7 and 3-7, Project Element 4 *Conceptual Dredge Plan*, of the Draft EIR), depicting the shallow shoreward margin of the berths between Piers 3 and 4 being fully dredged to accommodate ship access. The preliminary dredge plan was based on bulkhead and bank stability requirements rather than berthing optimization for the larger amphibious assault ships (LHD/LHA). However, since publication of the Draft EIR, the design, volume of material, and resulting dredging footprint for Project Element 4 (as shown on Figures ES-7 and 3-7 of the Draft EIR) have been advanced and refined. The revised dredging footprint for Project

Element 4 is provided in Chapter 4, Errata and Revisions, of the Final EIR. The reduced dredge area occurs within the initial dredge envelope. The refined dredging plan would result in the removal of approximately 554 square feet of eelgrass, which is reduced from the prior dredging estimate of 2,004 square feet of eelgrass reported in the Draft EIR (Section 4.2 and Appendix D-1 of the Draft EIR). The refined dredging plan would also result in the removal of approximately 6,300 cubic vards of material rather than the previously estimated 15,000 cubic yards (Figures 2-7a, b, and c and 3-7a, b, and c of the Final EIR). The project description for Project Element 4 (Section 3.4.4 of the Draft and Final EIR) retains the estimated dredge quantity volume of 15,000 cubic vards of material. For the purposes of impact analysis, the dredge volume of 15,000 cubic yards of material was retained because it represents a more conservative analysis. (The lesser, revised cubic vardage is approximately half of the previously assumed amount.) With the reduction in dredging amount, however, the potential impacts analysis in the Draft EIR would be marginally reduced proportional to the reduction in dredging.

While the proposed project would result in the removal of eelgrass within the Project Element 4 dredging footprint, the eelgrass that would be removed is regrowth in an area of previous eelgrass removal associated with the San Diego Shipvard Sediment Remediation Project (SCH #2009111098), and the loss of eelgrass from that removal was previously mitigated for through the establishment of the South Bay Mitigation Site.¹ The South Bay Mitigation Site is 3 years into the 5-year mitigation monitoring program. The *36-Month Post-Transplant Report* for the South Bay Mitigation Site (prepared in June 2020), mapped beds supporting approximately 113% of the mitigation need. This achieves compliance with the mitigation milestones outlined in the California Eelgrass Mitigation Policy (CEMP), which provides that 100% areal coverage should be achieved at the 36-month milestone.² The CEMP also establishes a standard of achieving 85% of the turion density within 36 months of the transplant. The 36-Month Post-Transplant Report for the South Bay Mitigation Site found that, as of June 2020, the transplant site mean density (146.3±58.5 turions/m²) at the South Bay

¹ The South Bay Mitigation Site was also used to offset overwater coverage impacts from the Pier 1 North Drydock, Associated Real Estate Agreements and Removal of Cooling Tunnels Project (SCH #2014041071).

² <u>https://media.fisheries.noaa.gov/2020-08/cemp_oct_2014_final.pdf</u> (NOAA Fisheries 2014).

Mitigation Site is 128% of that in the reference site (114.3±47.3 turions/m²). Thus, the South Bay Mitigation Site exceeds the CEMP progress milestone and is successfully functioning as a mitigation site for previously removed eelgrass at the project site. It should be noted that mitigation involving transplanted eelgrass is not considered successful until, after 60 months (5 years), the mitigation site achieves 100% of the required eelgrass coverage and 85 percent turion density relative to the reference site, consistent with the CEMP. The full 36-Month Post-Transplant Report is provided as Exhibit 1. Please also see Exhibit 2 for the Final Eelgrass Transplant and Monitoring Plan (November 2015) for the San Diego Shipyard Sediment Remediation Project and the Pier 1 North Drydock, Associated Real Estate Agreements and Removal of Cooling Tunnels Project.

Figure 1-1, provided in Exhibit 3, shows the footprints of the various inwater project elements of the proposed project, with an overlay depicting eelgrass that was removed, and successfully mitigated for, as part of the San Diego Shipvard Sediment Remediation Project, based on 2014 survey data. This includes the overall extent of eelgrass proposed for removal due to dredging for applicable in-water project elements. In addition, November 2018 survey data shows that there are a few locations where eelgrass extends beyond the spatial distribution previously existing, removed, and mitigated for as part of the San Diego Shipvard Sediment Remediation Project. The recruitment into these areas was likely driven by changes in slope or stability in areas where cover was applied, primarily between Piers 3 and 4 with a small amount of eelgrass extending outside of the previous extent north of Pier 2. It should be noted that eelgrass seedlings have the ability to be dispersed and become established in areas that may not be suitable for long-term survivability due to depth or lack of available light, among other factors. The individual project elements (comprising the proposed project) would not result in any direct impacts on these areas, as shown on Figures 1-1 through 1-4 of Exhibit 3.

Figure 1-2 of Exhibit 3 shows the extent of eelgrass specifically proposed for removal as part of Project Element 4, with the same eelgrass overlay shown in Figure 1-1. As shown in Figure 1-2, the eelgrass proposed to be removed pursuant to Project Element 4 is all *regrowth*, and the removal was previously the subject of successful mitigation. Consequently, direct impacts on existing eelgrass that has regrown within the previously mitigated bed locations within the

project site would be considered less than significant, and no mitigation would be required.

The conclusion that removal of regrowth eelgrass that was previously mitigated for should not be considered a significant impact is consistent with the CEMP, which provides that for *ongoing projects*. once mitigation has been successfully implemented to compensate for the loss of eelgrass habitat function within a specified footprint, National Marine Fisheries Service (NMFS) should not recommend additional mitigation for subsequent loss of eelgrass habitat if (1) *ongoing project activities* result in a subsequent loss of eelgrass habitat function within the same footprint for which mitigation was completed and (2) the project applicant can document that no new area of eelgrass habitat is affected by project activities. Therefore, the CEMP does not require additional mitigation when (1) prior mitigation is successfully implemented for the loss of eelgrass function within a specific footprint. (2) ongoing project activities result in a subsequent loss of eelgrass within the same footprint, and (3) no new area of eelgrass habitat is affected by project activities. All three of the components identified by the CEMP are present for the proposed project. The eelgrass that would be removed by the project is (1) within the same specific footprint where mitigation was successfully implemented (as a part of the Pier 1 North Drydock, Associated Real Estate Agreements and Removal of Cooling Tunnels Project and the San Diego Shipyard Remediation Project), (2) is part of a larger ongoing project, the operation of the BAE Systems shipyard, and (3) no new area of eelgrass habitat is directly affected by project activities. Because of these facts, the EIR properly concludes that the removal of *regrowth* eelgrass, of which prior removal was the subject of successful mitigation, is considered to be a less-than-significant impact and no mitigation is required.

It should also be noted that, notwithstanding the conclusions of the EIR, which are supported by substantial evidence, the CWA Section 404 process and compliance with the CEMP is mandatory. Section 4.2 of the Draft EIR notes that the proposed project requires a permit under Section 404 for in-water project activities that would result in dredge/fill in the San Diego Bay. The U.S. Army Corps of Engineers (USACE), which is responsible for permitting under Section 404, is required by the Magnuson-Stevens Fishery Management Conservation Act (MSFMCA) to consult with NMFS on any actions that may adversely

affect EFH, which includes eelgrass pursuant to the 1996 amendment to the MSFMCA. The CEMP was developed by NMFS to establish and support a goal of protecting eelgrass and its habitat functions. The CEMP mandates pre-construction and post-construction eelgrass surveys to be conducted at the time of any in-water work. To the extent that eelgrass removal triggers mitigation (unless subject to the provisions recited above regarding ongoing projects and loss within the same footprint), the CEMP mandates that removal be mitigated at an ultimate replacement ratio of 1.2:1. Because of the consultation requirements between NMFS and USACE, the CEMP is applicable to USACE regulatory approvals of any applicable in-water project elements.

For the reasons outlined above regarding direct removal of *regrowth* eelgrass, any indirect impacts on existing eelgrass that has regrown within the previously mitigated beds on the project site from in-water construction activities, such as shading from construction equipment and increased turbidity, would be less than significant and therefore would not require additional mitigation.

To the extent project elements propose construction activities that could result in indirect impacts on new eelgrass beds, **Impact-BIO-5** and mitigation measure **MM-BIO-5** have been slightly modified to apply to all in-water project elements (i.e., Project Elements 1 through 9). As modified, **MM-BIO-5** would ensure that any indirect impacts resulting from implementation of the proposed project would be mitigated to a less-than-significant level. **MM-BIO-5** has been modified as follows:

MM-BIO-5: Implement Eelgrass Protection Measures and CEMP <u>**Compliance.**</u> Prior to commencing in-water construction activities for Project Element<u>s 1 through 97 (Quay Wall Modifications)</u>, the project proponent shall implement the following measures to ensure protection of eelgrass beds-located immediately south of the proposed Quay Wall Modifications.

• Adhere to the Clean Water Act Section 404 permitting process and ensure California Eelgrass Mitigation Policy compliance through the Section 404 permit and coordination with the National Marine Fisheries Service.

- Perform a preconstruction eelgrass survey in accordance with the California Eelgrass Mitigation Policy.
- Temporarily install a silt curtain to contain turbidity during <u>all</u> <u>in-water construction activities for Project Elements 1 through</u> <u>9dredging of rock, dredging of sediment, and installation of sheet</u> <u>pile during quay wall modifications</u>.
- Provide results of the preconstruction eelgrass survey during a contractor education meeting and instruct the contractor not to contact the bottom or stage vessels over eelgrass vegetated areas and instruct that the use of a silt curtain is necessary during <u>all</u> <u>in-water construction activities for Project Elements 1 through 9</u> quay wall modifications.
- Perform a post-construction eelgrass survey in accordance with the California Eelgrass Mitigation Policy to validate protection of adjacent eelgrass beds following construction. In the event that unforeseen impacts to eelgrass occur, those impacts would be mitigated by increasing the amount of restoration or withdrawal of eelgrass mitigation bank credits as specified under **MM-BIO-4**, subsection 2.B<u>, or as may be otherwise required by applicable regulatory agencies to ensure CEMP compliance, and utilizing the methods and standards as may be required by the regulatory agencies.</u>

The changes made for clarification are reflected in Chapter 4, *Errata and Revisions*, of the Final EIR. Figure 1-1 of Exhibit 3 shows the spatial distribution of regrowth eelgrass, non-regrowth eelgrass, and the footprint of project elements. **MM-BIO-5**, as revised, requires implementation of eelgrass protection measures during all waterside construction activities for Project Elements 1 through 9, such as conducting pre-construction and post-construction surveys in accordance with the CEMP, installing turbidity curtains, educating contractors on the presence of nearby eelgrass, and performing monitoring. Finally, **MM-BIO-5** requires that restoration, creation, or the purchase of eelgrass mitigation bank credits would be required for eelgrass affected by construction activities (except as stated above for regrowth eelgrass). It should be noted that the changes to **MM-BIO-5** are consistent with the CEMP which, as discussed above, is a required component of the CWA Section 404 (regulatory) permitting process.

Thus, CEMP compliance is mandatory and would serve to ensure any indirect impacts that may be identified during post-construction surveys remain less than significant.

Moreover, the Draft EIR identifies several mitigation measures that are intended to avoid and reduce water quality impacts from construction of in-water project elements. These mitigation measures include **MM-BIO-1** (Implement Construction Measures to Eliminate Water **Quality Impairment Impacts on California Least Tern and California** Brown Pelican Foraging), MM-HAZ-2 (Implement a Dredging Management Program), MM-HAZ-3 (Implement a [Waterside] Sediment Management Program), and MM-HAZ-4 (Comply with Federal and State Permits). Briefly, these mitigation measures require the implementation of various water quality protection measures, such as turbidity curtains, standard operating procedures during dredging, specific requirements for jetting and spudding, and compliance with all regulatory requirements related to water quality (e.g., federal and state permitting requirements). The full text of these mitigation measures is provided in Section 4.2, Biological Resources, and Section 4.4, Hazards and Hazardous Materials, of the Draft EIR. These mitigation measures would further reduce indirect water quality impacts on eelgrass both within and outside of the project site.

<u>Project Element 1 – Pride of San Diego Drydock Dredging and</u> <u>Moorage</u>

The dredging proposed by Project Element 1 includes two components: (1) dredging of the drydock sump area, which would allow the drydock to submerge and lift vessels in place without the need for the drydock to be moved, and (2) removal of potentially contaminated sediment around the Pride of San Diego ramp wharf (proposed to be replaced and realigned as part of Project Element 2) that was not accessible during previous remedial dredging that occurred in 2015. Figures 1-1 and 1-3 of Exhibit 3 show the extent of the dredging footprint for both dredge components of Project Element 1 (as further refined by BAE Systems subsequent to the release of the Draft EIR). These figures also show the extent of dredging that occurred in 2015 as part of the San Diego Shipyard Sediment Remediation Project.

The dredging and placement of sand cover pursuant to the San Diego Shipyard Sediment Remediation Project raised the elevation of the bay
bottom, which allowed for the growth of eelgrass in the vicinity of the Project Element 1 dredge areas. Figures 1-1 and 1-3 of Exhibit 3 show the spatial distribution of eelgrass observed in 2018 as compared to eelgrass that existed prior to the 2015 San Diego Shipyard Sediment Remediation Project. Figure 1-3 of Exhibit 3 shows that the majority of eelgrass within the vicinity of the Project Element 1 dredge footprints is regrowth eelgrass, but that there are limited areas of eelgrass not considered regrowth. However, as further demonstrated by Figure 1-3 of Exhibit 3, dredging activities proposed as part of Project Element 1 would not result in the removal of the nearby eelgrass beds, whether new growth or regrowth. Therefore, because the dredging activities proposed by Project Element 1 would avoid eelgrass, there is no direct impact on eelgrass from implementation of Project Element 1.

The eelgrass beds near the footprint of Project Element 1 may have indirect impacts from construction activities associated with this project element, namely dredging, shading from construction activities, and turbidity resulting from construction. However, as noted in the beginning of this response above with respect to Project Element 4 dredging, modifications to mitigation measure **MM-BIO-5** and compliance with the CEMP would ensure that any indirect impacts resulting from implementation of Project Element 1 would be mitigated to a less-than-significant level.

<u>Project Element 2 – Pride of San Diego Drydock Wharf</u> <u>Replacement and Realignment</u>

Project Element 2 proposes wharf and ramp modifications that would extend the existing Pride of San Diego wharf to provide a material handling area adjacent to the northeastern portion of the drydock, a new pedestrian access ramp and support platform, and apron. Figures 1-1 and 1-3 of Exhibit 3 show the extent of the Project Element 2 footprint, accounting for the wharf extension, access ramp, and other components. Figure 1-3 of Exhibit 3 also shows the location of regrowth eelgrass and new eelgrass occurring in the vicinity of Project Element 2. As shown in Figure 1-3 of Exhibit 3, a portion of the wharf extension would extend over both regrowth and new eelgrass beds. Project Element 2 does not propose any construction activities that would have direct impacts on (i.e., remove) these beds. Consistent with the discussion above, any coverage extension over regrowth eelgrass beds would not be considered a significant impact because regrowth

eelgrass was previously the subject of successful mitigation for the San Diego Shipyard Sediment Remediation Project. With respect to coverage over new eelgrass beds, the CEMP notes that any impacts associated with such coverage should be considered a potential indirect impact, the actual impact of which (if any) would be determined through pre-construction and post-construction surveys required by the CEMP. Using the 2018 eelgrass survey, but acknowledging that eelgrass distribution fluctuates annually. sometimes to a great degree (which is why the CEMP mandates preconstruction and post-construction surveys to assess potential impacts), the new overwater structure for Project Element 2 would cover an approximately 100-square-foot area of non-regrowth eelgrass. However, consistent with the CEMP, any impact of increased shading likely cannot be determined until a substantial period after the improvement is completed. To assess any indirect impacts that could occur from increased shading, the CEMP, as further enforced through **MM-BIO-5**, requires multiple post-construction surveys, including 1 year and 2 years after the first post-construction survey. These latter surveys "will be used to evaluate if indirect effects resulted later in time due to altered physical conditions...." Therefore, while Project Element 2 would introduce slight additional cover over new eelgrass beds, compliance with **MM-BIO-5** and the CEMP (which is required irrespective of a mitigation requirement) would ensure that any indirect impacts from shading would be reduced to a less-thansignificant level.

Furthermore, as discussed in Section 4.2 of the Draft EIR, **MM-BIO-4** is required to lessen any potential impacts associated with overwater coverage and associated loss of open water habitat. To address this potential impact, **MM-BIO-4** requires the project proponent to consult with the appropriate resource agencies regarding mitigation of these impacts and implementation of the specified mitigation options identified in the mitigation measure. **MM-BIO-4** also includes a provision that the mitigation measure in no way supersedes any additional or greater mitigation measures that may be required by state and federal agencies.

Project Element 3 - Fender System Repair and Replacement

Project Element 3 proposes to remove and replace existing fender piles throughout the project site, including the removal and installation of

H-piles. Draft EIR Figure 3-1 shows the location of proposed fender pile replacement. Project Element 3 does not propose work within the footprint of any regrowth or new eelgrass beds. Project Element 3 would replace existing piles and fender systems and would not increase overwater coverage (see Draft EIR Table 4.2-5). The fender pile system and bulkhead piling areas have been in place for many years and have developed biogenic rubble around the toe of the fender and bulkhead structures as encrusting organisms on the fender piles and walls die and fall to the bottom over the years. This has created a hard bottom margin that varies in width from 5 to 10 feet, depending upon water depth, bottom slope, and other factors. Because of this, eelgrass is generally prevented from growing to the base of the fender and bulkhead systems (see Appendix D-1 of the Draft EIR). As such, Project Element 3 would not result in any direct impact on eelgrass. Please refer to Figure 1-1 of Exhibit 3, which shows the location of the Project Element 3 footprint relative to onsite eelgrass beds (both regrowth and new growth). The closest proximity of Project Element 3 improvements to new eelgrass growth is approximately 9 feet, and occurs in the vicinity of the Project Element 2 proposed ramp wharf replacement. As such, there is a potential for indirect impacts associated with Project Element 3. However, the pile removal and replacement activities are generally low bottom disturbance, and extraction and replacement of fender piles would have very localized impacts at the points of pile removal and replacement. Nevertheless, due to the presence of new growth eelgrass beds within the project site (and the vicinity of Project Element 3 work), MM-BIO-5 has been clarified to apply to all in-water construction activities. With implementation of MM-BIO-5, adherence to the CWA Section 404 process, and compliance with the CEMP, any potential indirect impacts would be mitigated to a less-than-significant level.

Project Element 4 - Pier 3 South Nearshore Dredging

Please refer to the discussions of Project Element 4 (provided at the beginning of this response) and Project Element 1, above.

Project Element 5 - Pier 3 Mooring Dolphin

Project Element 5 proposes the installation of an additional mooring dolphin to ensure safe vessel moorage during extreme climatic conditions. As shown on Draft EIR Figure 3-1, Project Element 5 would

occur a substantial distance away from the shoreline (970 feet) and in depths that far exceed those capable of supporting eelgrass growth. Therefore, no direct eelgrass impacts would occur. While Project Element 5 would not result in any direct impacts on new eelgrass growth, there is a potential that in-water construction activities for this project element could have indirect impacts on new growth eelgrass beds, namely from turbidity. However, as noted in the beginning of this response above with respect to Project Element 4 dredging, modifications to mitigation measure **MM-BIO-5** and compliance with the CEMP would ensure that any indirect impacts resulting from implementation of Project Element 5 would be mitigated to a less-thansignificant level.

<u>Project Element 6 – Pier 3 North Lunchroom Wharf</u> <u>Replacement and Realignment</u>

Project Element 6 proposes limited in-water and over-water work to facilitate the replacement of the Pier 3 North lunchroom wharf, including removing and installing piles, removing an existing overwater structure supported by existing piles, constructing a new overwater structure, and limited dredging. Figure 1-3 of Exhibit 3 shows the area of work proposed by Project Element 6, including dredging footprint and the replacement and reconfiguration of the lunchroom wharf. There is an approximately 16-square-foot eelgrass bed within the Project Element 6 work footprint. However, the eelgrass is *regrowth* eelgrass that was previously removed and mitigated for as part of the San Diego Shipyard Sediment Remediation Project. As discussed above, potential direct impacts (i.e., removal) or indirect impacts on *regrowth* eelgrass that was previously the subject of successful mitigation is not considered to be a significant impact. Therefore, no significant direct or indirect impacts on *regrowth* eelgrass would occur as a result of implementation of Project Element 6. Additionally, **MM-BIO-5** has been clarified to apply to all inwater construction activities to ensure that any in-water activities (including using boats for construction) would not result in indirect impacts on eelgrass. With implementation of MM-BIO-5, adherence to the CWA Section 404 process, and compliance with the CEMP, any potential indirect impacts associated with Project Element 6 would be mitigated to a less-than-significant level.

Project Element 7 - Quay Wall Modifications

Please refer to the discussion of Project Element 7 in Section 4.2 of the Draft EIR.

Project Element 8 - Port Security Barrier Replacement

The Port Security Barrier Replacement proposed as Project Element 8 would include anchoring on the shore, similar to the existing barrier, and floating portions extending around the BAE Systems ship repair yard water perimeter attached to anchor blocks and mooring buoys, as indicated in Figures 3-1 and 3-5 of the Draft EIR. The onshore attachment and placement of anchor blocks and mooring buoys would not be near mapped eelgrass. The closest portions of Project Element 8 to eelgrass consist of the onshore anchor point at the north end of the site, as shown in Figure 1-4 of Exhibit 3. This anchor point is on upper rubble shoreline, approximately 59 feet from regrowth eelgrass. The floating barrier would cross over eelgrass areas previously removed and mitigated under the San Diego Shipyard Sediment Remediation Project dredging and within a few feet of *regrowth* eelgrass. The proposed first anchor block and mooring buov off the north shore anchor is approximately 550 feet outside of the closest eelgrass and in water too deep to support eelgrass habitat. As such, Project Element 8 would not result in any direct impacts on eelgrass. While it is anticipated to generate very limited new shading, floating portions of the Port Security Barrier Replacement that extend across mapped eelgrass would introduce some shading that could result in indirect impacts on mapped eelgrass. However, to the extent shading does occur, it would occur in areas of regrowth eelgrass that were previously mitigated for as part of the San Diego Shipyard Sediment Remediation Project, as shown on Figure 1-4 of Exhibit 3. The Draft EIR properly concludes that potential impacts on regrowth eelgrass, which prior to removal was the subject of successful mitigation, would be less than significant and no mitigation is required. MM-BIO-5 would also ensure that any indirect impacts on eelgrass from implementation of Project Element 8 would be less than significant (as would required compliance with the CEMP).

Project Element 9 - Small Boat Mooring Float Replacement

Project Element 9 proposes to replace an existing small boat mooring float with two new floats that in sum are slightly larger in size than the existing float. Four existing piles would also be replaced. The new mooring floats and replaced piles occur in areas of regrowth eelgrass, as evidenced by Figure 1-3 of Exhibit 3. Project Element 9 does not propose any construction activities that would have direct impacts on (i.e., remove) these beds. Consistent with the discussion above for other project elements, any overwater coverage extension over regrowth eelgrass beds would not be considered a significant impact because regrowth eelgrass was previously the subject of successful mitigation as part of the San Diego Shipyard Sediment Remediation Project. Moreover, to the extent that indirect impacts could result from implementation of Project Element 9, implementation of MM-BIO-5 and compliance with the CEMP (which is required irrespective of any mitigation requirements under CEQA) would ensure that any indirect impacts from shading would be reduced to a less-than-significant level. Any shading impacts from the expanded mooring floats would also be mitigated by implementation of MM-BIO-4 and would be reduced to a less-than-significant level.

Response to Comment A-8

The comment restates information from the Draft EIR that impacts on eelgrass within the project boundaries were addressed through the Shipyard Sediment Remediation Project eelgrass mitigation. The comment indicates that the Draft EIR states the Shipyard Sediment Remediation Project resulted in 0.5 to 0.8 acres of eelgrass habitat impacts and was mitigated for at the South Bay Eelgrass Mitigation Site. The comment indicates that the details of the 2015 Shipyard Sediment Remediation Project such as the final mitigation acreages, mitigation ratios, success of the mitigation, and justification for how it is applicable to the proposed project are missing from the Draft EIR. The comment further states that CDFW is fully unable to analyze and agree with this assessment without this information.

Please see response to comment A-7, which provides information about the Shipyard Sediment Remediation Project, mitigation requirements, and the success and status of mitigation implemented

for that project as relevant to the currently proposed project. The response also explains, in detail, why the proposed project would not have a significant impact on eelgrass occurring on the project site. The full 36-Month Post-Transplant Report is provided as Exhibit 1. Please also see Exhibit 2 for the Final Eelgrass Transplant and Monitoring Plan (November 2015) for the San Diego Shipyard Sediment Remediation Project and the Pier 1 North Drydock, Associated Real Estate Agreements and Removal of Cooling Tunnels Project.

San Diego Unified Port District

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Policy (NMFS 2014). Absent a full description of how the Shipyard Sediment Remediation Project mitigation is applicable to eelgrass impacts in the DEIR for this Project, the Department is unable to fully analyze and agree with this assessment.

Recommendations: The Department recommends the proposed Project avoid and minimize impacts to eelgrass and fully mitigate for any significant and unavoidable eelgrass losses. To reduce the impact to eelgrass to a level of less than significant, the Department recommends including the following in the Final Environmental Impact Report (FEIR):

- The Department recommends a full description of how the Shipyard Sediment Remediation Project mitigation from 2015 is applicable to eelgrass impacts for the proposed Project in the FEIR. Information the Department recommends includes but is not limited to: final mitigation acreages, mitigation ratios, a detailed
- description as to how the current Project is an ongoing project, a description of how the past impacts and mitigation are similar and applicable to the proposed current Project impacts, the 2015 BAE remediation project elgrass mitigation and monitoring plan, and the post-construction survey reports and analysis. Absent the additional information, the Department recommends that additional mitigation be included for the loss of 2004 square feet of eelgrass from proposed Project dredging.
 - Impacts from vessel anchoring/propeller scaring or shading should be avoided. The Department recommends creating a plan to avoid anchoring in eelgrass habitats and providing it to vessel operators.
 - Should additional eelgrass mitigation be required, The Department recommends developing a tentative eelgrass mitigation and monitoring plan with input from the Department and other resource and permitting agencies.

If transplanting of eelgrass is required for mitigation, a Scientific Collecting Permit (SCP) from the Department will be required prior to harvest and transplanting activities. The SCP may include conditions such as site selection of donor beds, limits on number and density of plants collected, methods for collection and transplanting, notification of activities, and reporting. Please visit the Department's SCP webpage for more information: https://wildlife.ca.gov/Licensing/Scientific-Collecting.

Comment 2 - Overwater Structures:

Comment: As described within the DEIR, the Project will result in 12,925 square feet of increased overwater structure, reducing the available open water habitat that is used for foraging by fish-eating avian species. The DEIR proposes four potential mitigation options to compensate for the loss of open water habitat. The mitigation options include 1) remove the combined at the second secon

A-11 the equivalent amount of existing overwater coverage in San Diego Bay (12,925 square feet); 2) restore or create 12,925 square feet of eelgrass habitat; 3) purchase saltmarsh wetland or overwater structure credits from a suitable in-leu fee program or mitigation bank; or 4) purchase credits from the District's shading credit program.

Response to Comment A-9

The comment recommends avoidance and minimization of eelgrass impacts and mitigation for any significant and unavoidable loss of eelgrass. The comment also provides several specific recommendations to be included in the Final EIR.

The comment first recommends providing a description of how the Shipyard Sediment Remediation eelgrass mitigation is applicable to eelgrass impacts for the proposed project. Information recommended by the comment includes final mitigation acreages, mitigation ratios, a detailed description as to how the proposed project is an ongoing project, a description of how the past impacts and mitigation are similar and applicable to the proposed project, the 2015 Shipyard Sediment Remediation Project eelgrass mitigation and monitoring plan, and the post-construction survey reports and analysis. Without this information, the comment recommends that additional mitigation be included for the loss of 2,004 square feet of eelgrass from the proposed project.

Second, the comment recommends avoidance of impacts from vessel anchoring/propeller scarring or shading. The comment also recommends creating a plan to avoid anchoring in eelgrass habitats and providing it to vessel operators.

Lastly, the comment recommends developing a tentative eelgrass mitigation and monitoring plan with input from CDFW and other resource and permitting agencies should eelgrass mitigation be required.

Please see the response to comment A-7, which provides information about the Shipyard Sediment Remediation Project, mitigation requirements, and the success and status of mitigation implemented for that project as relevant to the currently proposed project. The response also explains, in detail, why the proposed project would not have significant impacts on eelgrass occurring on the project site.

Regarding the recommendation to avoid impacts from vessel anchoring/propeller scarring or shading, as described in the response to comment A-7 and disclosed in Section 4.2 of the Draft EIR, mitigation measure **MM-BIO-5** requires implementation of eelgrass protection

measures prior to and during all waterside construction activities, such as conducting pre- and post-construction surveys in accordance with the CEMP, instructing the contractor not to contact the bottom or stage vessels over eelgrass vegetated areas, and installing turbidity curtains. **MM-BIO-5** has been revised to apply to all in-water construction activities to ensure that any potential indirect impacts are addressed through the CEMP. As such, implementation of MM-BIO-5 would ensure that potential eelgrass impacts from vessel anchoring/propeller scarring during construction are reduced to a less-than-significant level. **MM-BIO-5** reinforces implementation of the CEMP, which is required through the CWA Section 404 permitting process, and consultation with NMFS under the Magnuson-Stevens Fisheries Management and Conservation Act. It is not anticipated that impacts on eelgrass habitat within the project site would occur during project operations because eelgrass within the project site is restricted to the shallow margins of the shipyard (areas potentially supportive of eelgrass) and does not occur within vessel berthing or normal operational areas. The shipyard currently has a no-wake and less-than-5-mph requirement for vessels operating within the yard. It is not anticipated that eelgrass impacts would occur as a result of the normal activities within the shipyard given the existing requirements for safe operations. As such, a separate eelgrass protection plan is not proposed. No changes to the Draft EIR are required.

Regarding development of a tentative eelgrass mitigation and monitoring plan, as required by mitigation measure MM-BIO-5, in the event that unforeseen impacts on eelgrass occur, those impacts would be mitigated by increasing the amount of restoration or withdrawing eelgrass mitigation bank credits as specified under MM-BIO-4, subsection 2.B. (see response to comment A-7). Should additional mitigation be required, the project proponent would be required to prepare a mitigation plan, which at a minimum would include a description of the transplant site, eelgrass mitigation requirements, eelgrass planting plan (e.g., transplant sites, donor sites, reference site), restoration methods (e.g., plant collection, transplant units, planning eelgrass units), timing of the restoration work, and a monitoring program (e.g., establishment of monitoring and mitigation success criteria). It is anticipated that any indirect impacts would first be mitigated within any surplus area (see response to comment A-7) of successful eelgrass restoration within the South Bay Eelgrass

Mitigation Site that was constructed by BAE Systems for the Pier 1 North Drydock, Associated Real Estate Agreements and Removal of Cooling Tunnels and San Diego Shipyard Sediment Remediation Projects. If inadequate eelgrass area exists within this site, then additional eelgrass mitigation would be proposed at an alternative site. The mitigation plan would be developed in coordination with resource and regulatory agencies, including CDFW, and implementation of the plan would be subject to approval by regulatory agencies. Planting the site would require obtaining a Scientific Collecting Permit authorizing collecting and planting of eelgrass. No changes to the Draft EIR are required.

Response to Comment A-10

The comment states that a Scientific Collecting Permit is required from CDFW for any mitigation requiring transplanting of eelgrass.

The project proponent will comply with all applicable requirements should mitigation require the transplanting of eelgrass, including obtaining a Scientific Collecting Permit from CDFW. However, this comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment A-11

The comment restates the impacts related to overwater coverage and the mitigation options presented in the Draft EIR for **MM-BIO-4**. The comment recommends mitigation Option 2 (restore or create equivalent eelgrass) and provides explanation as to why this option is being recommended. The comment suggests that other new wharf impacts may include reduction of water circulation as well as alteration of water currents in the vicinity of the new piles. The comment also suggests that merely removing overwater structures (Option 1) would only compensate for the surface water coverage impacts.

The District appreciates the recommendation provided by the commenter. **MM-BIO-4** is identified to address impacts related to increased overwater coverage and the associated loss of open water habitat (**Impact-BIO-4**). With respect to eelgrass, **MM-BIO-5** is recommended to ensure implementation of CEMP requirements,

compliance with which would ensure that any eelgrass habitat with indirect impacts, including as a result of shading from overwater coverage (see response to comment A-7), would be less than significant. Mitigation measure **MM-BIO-4** is intended to allow flexibility by providing several mitigation options, all of which would reduce potential impacts from increased overwater coverage to lessthan-significant levels. As this comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR, no changes to the Draft EIR have been made. However, this comment will be presented to the Board of Port Commissioners for consideration. Peter Eichar, Senior Planner San Diego Unified Port District August 18, 2020 Page 5

A-11 cont Recommendations: The Department recommends mitigation option 2 to restore or create 12,925 square feet of eelgrass habitat because the Project footprint for the new wharf will shade and degrade a significant amount of shallow water habitat that may have been potential eelgrass habitat prior to BAE shipyards acquiring and building in the Project area. Other new wharf impacts may include reduction of water circulation as well as alteration of water currents in the vicinity of new piles. Merely removing overwater structure (option 1) will only compensate for the surface water coverage impacts.

Comment 3 - Pile Installation/Removal:

Comment: According to the DEIR, the Project proposes the installation of 242 concrete and steel piles and 25 sheet piles use impact an impact hammer and vibratory pile driving. Also proposed is the removal of old piles using vibratory extraction and using jetting and/or spudding when necessary. If a treated wood pile cannot be fully removed, the Project proposes to cut the pile at least one foot below the mudline.

Recommendations: The Department is a signatory to the Interim criteria for injury to fish from pile driving Activities and recommends using the criteria within the guidance for all in write restrictions and the provided and the statement of t

A-12 water construction activities, such as pile driving, that may cause injury to fish due to elevated sound levels <u>https://dot.ca.gov/programs/environmental-analysis/caltransbiologr/biological-studies/hydroacoustics</u>. The Department recommends the use of vibratory pile driving when feasible and soft start and a wood cushion block when an impact hammer is necessary. Bubble curtains are also recommended for noise reduction to reduce pile driving noise impacts to fish and wildlife. If impact hammering is used, underwater noise monitoring equipment should be incorporated into Project noise mitigation plans. The Department also recommends cutting treated wood piles that cannot be fully removed at two feet below the mudline, not at the proposed one foot, in order to better cover any pile material left behind that may have contaminants, reducing the risk of them becoming uncovered.

Comment 4 – Dredging:

Comment: Described within the DEIR, the Project dredging footprint is likely to contain residual contaminants due to decades of shipyard operations. The previous 2015 sediment contamination remediation project characterized the site as having remaining toxic contaminants in some areas. Buried contaminated sediment may be resuspended during dredging activities. Dredge and pile construction contaminants and sedimentation

A-13 resuspension may have a significant impact on the California least tern and other sensitive seabirds and fish and invertebrate species.

Recommendations: The Department recommends that additional sediment analysis be done prior to dredge activities and that a Sediment Analysis Plan (SAP) be developed prior to a determination of where the dredge material will be disposed. Additionally, the Department recommends that a clamshell dredge be used for this project along with silt curtains, water quality monitoring, and other best management practices to reduce

Response to Comment A-12

The comment restates the methods for the installation and removal of piles as described in the Draft EIR. The comment notes that CDFW is a signatory to the Interim Criteria for Injury to Fish from Pile Driving Activities and recommends using the criteria in the guidance for all in water construction activities. The comment provides several recommendations for in-water work, including using vibratory pile driving when feasible and soft start with wood cushion block when impact hammer is necessary; using bubble curtains for noise; using underwater noise monitoring equipment if impact hammering is used; and cutting treated wood piles that cannot be removed at 2 feet below the mudline instead of 1 foot as currently proposed to reduce the risk of them becoming uncovered.

The commenter provides several recommendations for the installation and removal of piles. In-water construction activities for the proposed project would include impact pile driving, vibratory pile driving, and vibratory extraction of existing piles. When feasible, vibratory pile driving methods would be used. If an impact hammer is necessary, the project proponent would use a soft start with wood cushion block, which is also required by MM-BIO-3. Regarding the recommendation to cut treated wood piles that cannot be fully removed at 2 feet below the mudline, the goal of the proposed project is to fully remove wood pilings. However, if wood piles cannot be fully removed, mitigation measure **MM-HWO-1** requires that they be cut at least 1 foot below the mudline. To cut wood piles 2 feet below the mudline as suggested by the commenter would require more dredging, which could result in additional impacts. In addition, the comment does not provide any evidence that sediment is moving offsite, thereby allowing cut piles to become uncovered. Rather, the site generally accumulates sediment given orientation and general currents. Therefore, no changes to MM-HWQ-1 have been made in response to this comment.

Regarding the commenter's recommendation to use the criteria outlined in the Interim Criteria for Injury to Fish from Pile Driving Activities, Draft EIR Section 4.2.4.2, *Thresholds of Significance*, identifies the thresholds used for identifying impacts on aquatic species, including fish. The significance thresholds identified in the Draft EIR for aquatic species are consistent with the criteria recommended by the

commenter. As described in Section 4.2.4.2 and shown in Table 4.2-3 of the Draft EIR, the impact criteria for fish relies on the sound pressure levels identified in the interim criteria. These sound pressure levels include 206 dB-peak (peak pressure [Lpeak]), 187 dB SELcum for fish larger than 2 grams, and 183 dB SEL_{cum} for fish less than 2 grams. As discussed in Section 4.2 of the Draft EIR, impacts on fish are not considered significant because daily accumulated sound exposure levels would be expected to be behaviorally mitigated by fish moving away from sound sources or into acoustic shadows. This would allow fish to escape potential injury from sustained presence within impulsive noise environments. No singular peak acoustic event is expected to generate potential for injury to fish; therefore, behavioral adaptation is possible under all circumstances. As a result, there would be no significant impact on fish, and no mitigation is required. Nevertheless, mitigation measure MM-BIO-3, which is required to reduce potential impacts on marine mammals and green sea turtles, includes measures such as soft starts for in-water pile driving activities. The use of soft starts during pile driving activities would further reduce the potential for impacts on fish. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment A-13

The comment indicates that buried contaminated sediment may be resuspended during dredging activities. The comment also indicates that dredge and pile construction contaminants and sediment resuspension could have a significant impact on California least tern and other sensitive seabirds as well as fish and invertebrates. The comment recommends additional sediment analysis prior to dredging and that a Sediment Analysis Plan be developed prior to determining the location of dredged material disposal. The comment provides several other recommendations, including using a clamshell dredge as well as silt curtains, conducting water quality monitoring, and implementing other best management practices (BMPs); having a biological monitor during dredging; and conducting dredging outside of the bird breeding and nesting seasons (i.e., from October 1st to March 31st).

The comment raises several issues related to existing sediment contamination within the project site and provides various recommendations. The Draft EIR includes several mitigation measures

to address potential impacts associated with sediment contamination. It is important to note that the proposed project will further the previous remediation efforts by removing contaminated sediment that was not previously removed due to the existing overwater infrastructure (wharfs and piers) not allowing physical access to remove the sediment. As detailed in Section 4.4, *Hazards and Hazardous Materials*, implementation of mitigation measures **MM-HAZ-2** through **MM-HAZ-5** would minimize potential impacts associated with sediment contamination during in-water construction activities, including dredging and pile installation and removal located within areas with contaminated sediment.

MM-HAZ-2 requires the project proponent to implement a Dredging Management Program that must include the development of: (A) a Dredging Operations Plan identifying the appropriate standard operating procedures and sediment control BMPs to be implemented (irrespective of proposed dredge location); (B) Contingency Plan to prepare for equipment or operational failures; (C) Health and Safety Plan for Dredging Activities; (D) Communication Plan; and I Sediment Sampling and Remediation, to assess the condition of sediment postdredging and outline potential remediation approaches, as appropriate. All of the plans and reports included in the Dredging Management Program would be reviewed and approved by the District and/or the San Diego Regional Water Quality Control Board (RWOCB). Types of standard operating procedures and BMPs required under this measure include proper positioning of the barge vessel to minimize propeller wash, placement and maintenance of double silt curtains, controlling the swing radius of the unloading equipment, using a spillage plate, and using a power wash unit to reduce impacts related to spillage from the excavator arm onto transport vehicles. Regarding the commenter's recommendation to use a clamshell dredge, the project proponent indicated that a clamshell dredge would be used for any dredging associated with the proposed project. However, **MM-HAZ-2** has been revised as follows to clarify that a clamshell dredger would be used.

MM-HAZ-2: Implement a Dredging Management Program. The project proponent shall implement a Dredging Management Program (DMP) that complies with applicable permit requirements, including the Section 404 permit and the Section 401 water quality certification. The DMP shall be implemented prior to, during, and upon completion of dredging activities for the proposed project. <u>A</u>

<u>clamshell dredge shall be used for all project dredging activities.</u> The DMP shall contain the following elements, each of which have specific timing mechanisms as identified in the description of each element below:

....

This revision is a minor clarification that does not affect the analysis or conclusions of the Draft EIR. These changes are reflected in Chapter 4, *Errata and Revisions*, of the Final EIR.

In addition, MM-HAZ-2 requires sediment sampling and testing following the completion of dredging activities to determine whether contaminated sediments may have been exposed by dredging. This sampling and testing would be required if no in-water construction work that could potentially disturb sediment is proposed for a dredging area (a specific area that was subject to dredging within the project site), or if proposed in-water construction work proposed for the dredging area will not commence within 90 days after the completion of dredging. If in-water construction work that may potentially disturb sediment is proposed for a dredging area and will commence within 90 days after the completion of dredging, the project proponent must implement a Sediment Management Program, including sampling, as required by mitigation measure MM-HAZ-3, as described below. No sampling or testing is proposed prior to dredging as it is anticipated that dredging would remove all or most of any contaminated sediment. However, once dredged, the sediment would undergo testing and characterization to determine where it would be disposed. Under Section 103 of the Marine Protection, Research and Sanctuaries Act, USACE issues permits authorizing ocean disposal of dredge material. USACE relies on the U.S. Environmental Protection Agency's (EPA's) ocean dumping criteria (40 CFR 220-229) to evaluate permit requests (EPA 2020). To determine the suitability of the dredged material for unconfined aquatic ocean disposal, BAE Systems would conduct a dredged material suitability study in consultation with the USACE and EPA as part of the Ocean Dumping Permit process under Section 103 of the Marine Protection, Research and Sanctuaries Act. Any dredged material that is determined to contain contaminated sediment would be unsuitable for ocean disposal or reuse, and it would be disposed of at a permitted upland landfill. Dredge material destined

for upland disposal would be dewatered, treated, and disposed of in accordance with existing permit and landfill requirements.

MM-HAZ-3 requires the project proponent to implement a (Waterside) Sediment Management Program that must contain: (A) Sampling Analysis Plan (SAP); (B) Marine Sediment Contamination Characterization Report; (C) Contaminated Sediment Management Plan; (D) In-Water Activity Specific Procedures; and (E) Post-Construction Sampling and Analysis. As described in **MM-HAZ-3**, the SAP would be developed prior to in-water demolition or construction that could disturb contaminated sediment. All sediment sampling and analysis under **MM-HAZ-3** must occur after dredging activity and prior to other sediment-disturbing construction activity and would be performed in accordance with the requirements of the SAP. As noted above, no sampling or testing is proposed prior to dredging as it is anticipated that dredging would remove all or most of any contaminated sediment.

MM-HAZ-4 requires the project proponent to obtain all federal and state permits required for in-water construction activities and demonstrate to the District compliance with all permit conditions during in-water construction. **MM-HAZ-5** requires the project proponent to propose and conduct remediation of the site if, after in-water construction activities and dredging are complete, site sampling shows that concentrations of contaminants of concern exceed those set forth in Cleanup and Abatement Order R9-2012-0024 (or other levels as prescribed by the RWQCB). A full description of these mitigation measures is provided in Section 4.4 of the Draft EIR.

In addition to the hazard and hazardous materials mitigation measures, Section 4.2 of the Draft EIR includes mitigation measure **MM-BIO-1** to address potential water quality and turbidity impacts that could affect California least tern and California brown pelican foraging opportunities during construction. **MM-BIO-1** requires the implementation of construction measures in accordance with regulations—including CWA Sections 401 and 404, Rivers and Harbors Act Section 10, the NPDES permit, and Stormwater Management and Discharge Control Ordinance—to eliminate water quality impairments that could affect California least tern and California brown pelican foraging opportunities. This mitigation measure specifically requires the use of turbidity curtains around pile driving areas to restrict the

visible surface turbidity plume to the area of construction and pile driving. It should be noted that the CWA Section 401 Water Quality Certification, to be reviewed and approved by the RWQCB, certifies that the proposed discharge will comply with applicable water quality requirements, standards, limitations, and restrictions, including: (1) CWA Section 301 (Effluent Limitations), (2) CWA Section 302 (Water Quality Related Effluent Limitations), (3) CWA Section 303 (Water Ouality Standards and Implementation Plans), (4) CWA Section 306 (National Standards of Performance), and (5) CWA Section 307 (Toxic and Pretreatment Effluent Standards). When considering an application for a 401 Certification, the RWQCB considers water quality standards, such as beneficial uses (the uses of water necessary for the survival or well-being of people, plants, and wildlife, as designated in the applicable Water Quality Control Plan), water quality objectives (constituent concentrations, levels, or narrative statements representing water quality), and antidegradation policy (protecting existing water qualities). Therefore, the RWQCB is charged with ensuring that discharges, including dredging, meet all applicable water quality standards.

Additionally, **MM-BIO-2** requires the project proponent to conduct all construction activities between September 1 and February 14 (i.e., outside the nesting season) to the extent feasible. If construction activities are scheduled between February 15 and August 31, a qualified biologist (with knowledge of the species to be surveyed) would be retained who would conduct a focused nesting bird survey, and additional measures would be implemented should nesting birds be detected. However, **MM-BIO-2** has been revised in response to this comment to encompass the California least tern nesting season. This mitigation measure has been revised as follows:

MM-BIO-2: Avoid Nesting Season for Birds or Conduct Preconstruction Nesting Surveys. To ensure compliance with the MBTA and similar provisions under Sections 3503 and 3503.5 of the California Fish and Game Code, the project proponent shall conduct all construction activities between September October 1 and February 14 (i.e., outside the nesting season) to the extent feasible. If construction activities are scheduled between February 15 and August 31 September 30, the project proponent shall implement the following during construction[...]

Based on the above, potential impacts on California least tern and other sensitive seabirds, as well as fish and invertebrate species, have been adequately analyzed and disclosed in the Draft EIR. As this comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR, no further changes to the Draft EIR are required. Peter Eichar, Senior Planner San Diego Unified Port District August 18, 2020 Page 6

A-13 cont

A-14

entrainment of fish, reduce impacts to birds, and to ensure contaminants and turbidity plumes and sedimentation are contained within the dredge Project site. A biological monitor is recommended to monitor sensitive wildlife during dredging. The Department recommends dredging be done outside of bird breeding and nesting seasons. The California least tern nesting season is between April 1st and September 30th and the Department recommends dredging activities occur outside this window.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link:

http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: <u>CNDDB@wildlife.ca.gov</u>. The types of information reported to CNDDB can be found at the following link: <u>http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp</u>.

FILING FEES

The Project, as proposed, would have an impact on fish and wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by the

A-15 Department. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

The Department appreciates the opportunity to comment on the BAE Systems Waterfront Improvement Project Draft Environmental Impact Report to assist the San Diego Unified Port District in identifying and mitigating Project impacts on biological resources.

A-16

Questions regarding this letter or further coordination should be directed to Eric Wilkins, Senior Environmental Scientist Supervisor at 805-594-6172 or <u>Eric.Wilkins@Wildlife.ca.gov</u> and Loni Adams, Environmental Scientist at 858-627-3985 or Loni.Adams@Wildlife.ca.gov.

Sincerely,

Craig Shuman, D. Env. Marine Regional Manager

Response to Comment A-14

The comment states that CEQA requires that information developed during EIRs and negative declarations be incorporated into a database. The comment requests that any special-status species and natural communities detected during project surveys be reported to the California Natural Diversity Database (CNDDB).

As required under CEQA, the District will ensure that any special-status species and natural communities detected during surveys for the proposed project are reported to the CNDDB. The comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment A-15

The comment indicates that the project as proposed would have an impact on fish and wildlife and states that a filing fee is required when filing the Notice of Determination (NOD).

Potential impacts on fish and wildlife species resulting from construction and operation of the proposed project have all been mitigated to a less-than-significant level with the implementation of mitigation measures. The District will ensure the project proponent, BAE Systems San Diego Ship Repair Inc., pay all mandatory fees, including the CDFW CEQA Document Filling Fee cited by the commenter. The comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment A-16

The comment states that CDFW appreciates the opportunity to comment on the Draft EIR and concludes by providing CDFW's contact name and information.

The District appreciates CDFW's interest in the proposed project. This comment does not raise any environmental issues needing a response pursuant to CEQA.

San Diego Unified Port District

Peter Eichar, Senior Planner San Diego Unified Port District August 18, 2020 Page 7

- cc: Office of Planning and Research, State Clearinghouse 1400 10th St. #12, Sacramento, CA 95814
- ec: Becky Ota, Environmental Program Manager California Department of Fish and Wildlife <u>Becky.Ota@wildlife.ca.gov</u>

Eric Wilkins, Senior Environmental Scientist Supervisor California Department of Fish and Wildlife <u>Eric.Wilkins@wildlife.ca.gov</u>

Loni Adams, Environmental Scientist California Department of Fish and Wildlife Loni.Adans@wildlife.ca.gov

Corianna Flannery, Environmental Scientist California Department of Fish and Wildlife Corianna.Flannery@wildlife.ca.gov

Eric Chavez, Marine Habitat Resource Specialist National Marine Fisheries Service eric.chavez@noaa.gov

Marc Brown, Environmental Scientist Santa Ana Regional Water Quality Control Board Marc.Brown@waterboards.ca.gov

Larry Simon, Federal Consistency Unit Manager California Coastal Commission Larry.Simon@coastal.ca.gov

Sandy Vissman US Fish and Wildlife Service Sandy_Vissman@fws.gov

Habitat Conservation Program Branch CEQA Program Coordinator California Department of Fish and Wildlife <u>ceqacommentletters@wildlife.ca.gov</u>

REFERENCES

NMFS, 2014. California Eelgrass Mitigation Policy, National Marine Fisheries Service, https://archive.fisheries.noaa.gov/wcr/publications/habitat/california_eelgrass_mitigation/Final%20CEMP%20October%202014/cemp_oct_2014_final.pdf.

5.3.2 Comment Letter B: City of San Diego Planning Department

Comment Letter B



August 17, 2020

San Diego Unified Port District Attri: Peter Eichar Development Services Department 3165 Pacific Highway San Diego, CA 92101-1128

Subject: CITY OF SAN DIEGO COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE BAE SYSTEMS WATERFRONT IMPROVEMENT PROJECT (SCH #2019039040, UPD# EIR-2018-197)

Dear Mr. Eichar:

B-1 The City of San Diego ("City") Planning Department has received the Draft Environmental Impact Report (EIR) prepared by the San Diego Unified Port District (District) and distributed it to applicable City departments for review. The City, as a Responsible Agency under CEQA, has reviewed the Draft EIR and appreciates this opportunity to provide comments to the District. Continued coordination between the City, the District, and other local, regional, state, and federal agencies will be essential, especially if future ministerial or discretionary actions on behalf of the City are required. In response to this request for public comments, the City has the following comments on the Draft EIR for your consideration.

...

TRANSPORTATION & STORM WATER DEPARTMENT – MARK G. STEPHENS, ASSOCIATE PLANNER – MGStephens@sandiego.gov, 858-541-4361

4.5. Hydrology and Water Quality. Under 4.5.4.3 Project Impacts and Mitigation Measures, it is recommended that mitigation measure MM-HAZ-3: Implement a (Waterside) Sediment Management Program's Sampling and Analysis Plan, include water quality monitoring at a variety of locations, depths, and times throughout the day to assess if resuspended contaminated sediments are moving off of the project site, as cited in Section 4.5.2.2 Surface Water Quality. This monitoring should include sampling during the tidal exchanges after the slack tide, particularly towards the bay bottom. If monitoring data indicate sediment movement off the project site, the mitigation measure MM-HAZ-2 Contingency Plan should include additional actions to minimize the resuspension of sadiments to reduce impacts on water quality and achieve the "Less than Significant After Mitigation" characterization cited in Table 5-1, Summary of Significant Cumulative Impacts and Mitigation Measures.

ENVIRONMENTAL SERVICES DPEARTMENT – LISA WOOD, PRINCIPAL PLANNER – LEWood@sandiego.gov, 858-573-1236

- в-з
 - As a comment on the Notice of Preparation, the City's Environmental Services Department requested that solid waste impacts be addressed. The Draft EIR addresses solid waste impacts in the "Effects Found Not to

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Response to Comment B-1

The comment is an introductory comment indicating that the City of San Diego (City) Planning Department received the Draft EIR and distributed it to the applicable City departments for review. The City notes that it has reviewed the Draft EIR and is providing comments for consideration.

The District appreciates the City's interest in the proposed project. This comment is an introductory comment and does not raise any environmental issues requiring a response pursuant to CEQA. The specific comments raised following this introduction are listed separately, along with the District's individual responses.

Response to Comment B-2

The comment recommends including water quality monitoring as part of the SAP required under **MM-HAZ-3** (Implement Waterside Sediment Management Program) at various depths, locations, and times throughout the day to determine if contaminated sediment is moving off the project site. The comment suggests that if monitoring data indicates sediment movement off the project site, the Contingency Plan required under **MM-HAZ-2** (Implement a Dredging Management Program) should include additional actions to minimize water quality impacts to achieve a less-than-significant impact after mitigation characterization identified in Table 5-1 of the Draft EIR. The comment does not specify what additional actions are to be taken.

Because most of the waterside portion of the project site is a former remediation area under the oversight of the RWQCB, water quality monitoring currently occurs at specific intervals and locations previously approved by the RWQCB per the 2012 Cleanup and Abatement Order R9-2012-0024, *San Diego Bay Shipyard Sediment Cleanup for the NASSCO and BAE Leaseholds.* If additional monitoring is required as part of the CWA Section 401 Water Quality Certification process, it would occur with coordination between the District and the RWQCB, with oversight by the RWQCB. The proposed project must obtain all necessary regulatory permits prior to implementation, including CWA Section 404 and Section 401 Water Quality Certification

approvals from applicable regulatory agencies. The project applicant is required to adhere to all conditions and standards identified in those permits. CWA Section 401 Water Quality Certification, as approved and administered by the RWQCB, an agency with expertise in water quality regulation, certifies that the discharge proposed will comply with applicable water quality requirements, standards, limitations, and restrictions, including: (1) CWA Section 301 (Effluent Limitations), (2) CWA Section 302 (Water Ouality Related Effluent Limitations), (3) CWA Section 303 (Water Quality Standards and Implementation Plans), (4) CWA Section 306 (National Standards of Performance), and (5) CWA Section 307 (Toxic and Pretreatment Effluent Standards). When considering an application for a 401 Certification, the RWQCB considers water quality standards such as beneficial uses (the uses of water necessary for the survival or well-being or people, plants, and wildlife, as designated in the applicable Water Quality Control Plan), water quality objectives (constituent concentrations, levels, or narrative statements representing water quality), and antidegradation policy (protecting existing water qualities). Therefore, the RWQCB is charged with ensuring that discharges, including dredging, meet all applicable water quality standards.

Pursuant to **MM-HAZ-2**, sediment sampling post-dredging (and inwater construction) would adhere to sampling methods identified by Investigative Order No. R9-2017-0083, which was issued by the RWQCB and identified sampling methodologies intended to identify various sources of contamination located on site. The sampling methodology must be reviewed and approved by the RWQCB.

Additionally, this comment does not specify what additional actions should be incorporated into **MM-HAZ-2** or **MM-HAZ-3** or suggest there are deficiencies in them that would affect the effectiveness of these mitigation measures. Therefore, no revisions to the Draft EIR are required in response to this comment.

Response to Comment B-3

The comment restates the Notice of Preparation comment from the City's Environmental Services Department, requesting that solid waste impacts be addressed. The comment suggests that there is an inconsistency between the solid waste conclusions in the *Effects Found Not to be Significant* section and Section 4.3, *Greenhouse Gas Emissions*

and Energy, which the comment suggests includes mitigation related to solid waste management.

Section 4.3, *Greenhouse Gas Emissions and Energy*, notes that before mitigation the proposed project would be inconsistent with the District's Climate Action Plan (CAP) because it would not implement all relevant measures from the CAP, including measures designed to reduce waste and increase recycling. With the implementation of MM-**GHG-1** through **MM-GHG-3**, the proposed project would implement strategies to reduce waste and increase recycling consistent with and in compliance with AB 341, and therefore would be consistent with the CAP. The analysis in Section 4.3 does not identify a potential impact related to solid waste generated by the proposed project; it analyzes the proposed project's consistency with the measures in the CAP related to the reduction of waste. This is consistent with the discussion of solid waste impacts in Chapter 6, Section 6.3.14 of the Draft EIR, which explains why utilities and service systems impacts, including (1) whether the project is served by a landfill with sufficient permitted capacity and (2) whether the project would comply with federal, state, and local regulations related to solid waste, would not be significant. These analyses are wholly independent of the GHG and energy analyses presented elsewhere in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Chapter 5. Comments Received and District Responses

Page 3 Mr. Peter Eichar August 17, 2020

B-5

 B-3
 Be Significant" section, which is inconsistent with the analysis in the Greenhouse Gas Emissions and Energy section, which includes mitigation measures related to solid waste management.

 2.
 The Draft EIR states that the project would include the transport of un-dewatered dredge spoils directly to the section with th

B-4 B-4 a class III sanitary landfill, specifically the Otay Landfill. However, the Otay Landfill does not currently accept de-watered materials because of gas and odor issues, and is scheduled to close in 2028. No landfill in California is permitted to accept un-dewatered dredge spoils. To address potential solid waste impacts, the District should prepare a detailed Waste Management Plan which includes plans for de-watering and potentially other pretreatments in the analysis.

3. Executive Summary, page ES-35. MM-GHG-2(B) states the project proponent should recycle at least 50 percent of solid waste. This is inconsistent AB 341's waste reduction target of recycling 75 percent of solid waste. To address this inconsistency, the City recommends that MM-GHG-2(B) be revised as follows:

Comply with <u>State and local waste reduction requirements including AB 939 and</u> the City of San Diego Recycling Ordinance. This shall be mandatory and include <u>reducing waste by</u> 75 percent pursuant to AB 341, and complying with waste storage-recycling at least 50 percent of colid waste; compliance and with the City of San Diego Construction and Demolition Debris Deposit Ordinance. shall be mandatory and include recycling at least 65 percent of all construction and demolition debris. This<u>These</u> measures shall be applied during construction and operation of the proposed project.

4. Executive Summary, page ES-41. MM-HAZ-1(C) states that a Soil and Groundwater Disposal Plan will be developed. The City requests that specifications or parameters for this plan be included in the EIR. The Soil and Groundwater Disposal Plan should be submitted to the City's Erwironmental Services Department for review of the portions of the document that pertain to non-hazardous waste materials, and to the County Health Department for the portions of the document that pertain to hazardous materials. The City also recommends that the following provision be added to the mitigation measure: "The Soil and Groundwater Disposal Plan shall be submitted to the appropriate regulatory agencies, including the City of San Diego's Environmental Services Department, for review prior to finalization and implementation."

- 5. Project Description, page 3-31. The Project Description includes a description of the demolition of the site and states that the project will comply with the City's Construction and Demolition (C&D) Debris Ordinance, which specifies a minimum of 65% recycling. The description discusses an "approved" disposal facility.
- B-7 Typically, a particular landfill need not be specified, and there is no "approval" process. However, the materials should not be taken to a landfill, but rather to an approved recycling facility, per the City's C&D Ordinance.
 - 6. Project Description, page 3-31. The recycling rate specified on page 3-31 is less than the 75 percent specified in AB 341 and the City's Zero Waste Plan, which is part of the City's approved Climate Action Plan. The Green Port Program also supports waste reduction efforts, and includes policies which state that when possible, projects should exceed applicable environmental laws, regulations, and other industry standards.

 B-8
 The 75 percent diversion of demolition debris is feasible if high value materials are segregated at the site. Heavy materials, such as soils, concrete, and asphalt should be measured separately, and should have an overall goal of no less than 75 percent diversion unless they are especially hard to manage or contaminated. The remaining materials should have a combined target of 75 percent. It is recommended that a Waste Management Plan be prepared that includes the management measures as conditions of the permit, or as part of the Mitigation Monitoring and Reporting Program (MMRP).

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Response to Comment B-4

The comment suggests that the project would include the transport of un-dewatered dredge spoils directly to a class III sanitary landfill, specifically Otay Landfill. The comment states that Otay Landfill does not accept un-dewatered materials and that no landfill in California is permitted to accept un-dewatered dredge spoils. The comment suggests that the District prepare a Waste Management Plan to address solid waste impacts.

The commenter incorrectly states that the proposed project would include the transport of un-dewatered dredge spoils directly to Otay Landfill. As discussed in Chapter 3, *Project Description*, Section 3.5.3, dredge material would be dewatered, treated, and disposed of in accordance with existing permit and landfill requirements. Moreover, the Draft EIR identifies Otay Landfill as one of the *potential* landfills for disposal of sediment. As stated in Chapter 3, "Up to approximately 15,000 cy of dredged materials from the Pier 3 South Nearshore Dredging (Project Element 4) would be disposed of at an approved upland landfill, *such as* [emphasis added] the Otay Landfill and/or Sycamore Landfill." The project proponent would dispose of any dredged sediment designated for upland disposal at a permitted landfill capable of accepting this waste.

Pertaining to the suggestion to prepare a Waste Management Plan, as required under Chapter 12, Article 9, Division 5, of the San Diego Municipal Code, a Waste Management Form would be prepared as part of the Building Permit and/or Demolition/Removal Permit process, and the form would be obtained from the City. The Waste Management Form would identify the anticipated waste resulting from construction and demolition of the proposed project in compliance with the City of San Diego Municipal Code. The Draft EIR includes a description of solid waste that would be generated by construction of the proposed project in Table 3-3 of Chapter 3, Project Description. An analysis of construction and operational solid waste as it relates to GHG emissions and consistency with the District's CAP is provided in Section 4.3, *Greenhouse Gas Emissions and Energy*, of the Draft EIR. Moreover, the Draft EIR includes an analysis of both construction and operational solid waste impacts in Section 6.3.14 of Chapter 6, Additional Consequences of Project Implementation. As detailed in Chapter 6, eight

of the project elements require demolition of existing structures and disposal of the subsequent debris. The construction waste generated from this demolition would be transported from the site and disposed of at an approved upland disposal facility (e.g., Miramar or Otay Landfill). Construction waste would be recycled in accordance with the City of San Diego Construction and Demolition Debris Deposit Ordinance. Chapter 6 further states that none of the operational changes associated with the proposed project would generate new sources of solid waste that would require disposal at a landfill because the proposed project would not increase the number of employees at the site. As a result, the Draft EIR concludes that all impacts related to solid waste or a deficiency in the solid waste analysis in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment B-5

The comment suggests that the 50% recycling requirement in mitigation measure **MM-GHG-2** is inconsistent with the AB 341 waste reduction requirement of 75%. The comment recommends revisions to **MM-GHG-2** to address this inconsistency.

The proposed project would comply with all applicable state laws, including AB 341. Mitigation measure **MM-GHG-2** has been revised in the Final EIR as follows:

MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures. As a condition of all discretionary actions and/or Coastal Development Permits, the project proponent shall be required to implement the following measures to be consistent with the Climate Action Plan:

.....

B. Comply with AB 939, AB 341, the City of San Diego Construction and Demolition Debris Deposit Ordinance, and the City of San Diego Recycling Ordinance. This shall be mandatory and include recycling at least 50 percent of solid waste; compliance with the City of San Diego Construction and Demolition Debris Deposit Ordinance shall be mandatory and include implementing a recycling program to support the statewide goal of diverting 75

percent of solid waste from landfills by 2020 in accordance with <u>AB 341</u>. recycling at least 65 percent of all construction and demolition debris. This measure shall be applied during construction and operation of the proposed project.[...]

Construction and demolition waste generated by the proposed project would be recycled in compliance with the City's Construction and Demolition Debris Deposit Ordinance, which requires construction, demolition, and remodeling projects that need building or demolition permits to (1) pay a refundable recycling deposit; (2) divert debris by recycling, reusing, or donating usable materials, and (3) keep construction and demolition materials out of local landfills.

Additionally, the City of San Diego Zero Waste Plan is a framework of potential strategies for the City to implement to achieve targets of 75% diversion by 2020, 90% diversion by 2035, and "zero" by 2040 by identifying "*potential* diversion strategies for *future* action." Therefore, the Zero Waste Plan sets a framework for future City action to achieve identified diversion targets. The City's Zero Waste Plan specifically identifies the Construction and Demolition Debris Deposit Ordinance as setting recycling standards for construction and demolition projects. As noted on page 3-31 of the Draft EIR, the proposed project would comply with the mandates of the City's Construction and Demolition Debris Deposit Ordinance. The structures to be removed during demolition are made of recyclable materials such as steel and wood, and therefore would be diverted from local landfills.

The provisions of AB 341 would apply to operational solid waste generation. As stated in the legislative text of AB 341, it is the policy *goal* of the *state* (emphasis added) that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter (PRC Section 41780.01(a)). As noted by CalRecycle, it is "not written as a 75 percent diversion mandate for each jurisdiction" (CalRecycle 2020). AB 341 also establishes the statewide mandatory commercial recycling program that requires businesses that generate four cubic yards or more of commercial solid waste per week, or multi-family residential dwellings of five units or more must implement recycling program and would continue to do so during the implementation of the proposed project. While this regulation does

not specifically mandate development projects or individual businesses recycle 75 percent of generated waste, the project proponent would recycle all waste suitable for recycling. The project proponent would comply with all applicable recycling regulations, including those in the City's Recycling Ordinance. As previously mentioned, operation of the proposed project would not differ substantially from the current operations at the BAE Systems ship repair yard. Several project elements are infrastructure maintenance and modernization improvements that would not change existing operations, while other project elements would improve operational efficiency to allow service to newer and larger classes of vessels compared to existing conditions. The operational efficiency improvements would not be anticipated to result in a substantial change to the type or amount of solid waste produced at the project site. As detailed in Chapter 6, Additional *Consequences of Project Implementation*, none of the operational changes associated with the proposed project would generate new sources of solid waste that would require disposal at a landfill because the proposed project would not increase the number of employees at the site. As identified in BAE System's 2018 Sustainability Booklet, the facility achieves an approximate 71 percent recycling of generated waste during operations. For valuable scrap to be recycled, BAE Systems has a vendor on site weekly to recycle materials. BAE Systems would continue to implement the onsite recycling program following implementation of the proposed project. Therefore, the proposed project would comply with all applicable regulations pertaining to solid waste diversion. The changes made for clarification are reflected in Chapter 4, Errata and Revisions, of this Final EIR. No other changes to the Draft EIR are required.

Response to Comment B-6

The comment requests that specifications or parameters for the Soil and Groundwater Disposal Plan included under **MM-HAZ-1(C)** be included in the EIR. The comment also requests the Soil and Groundwater Management Plan be submitted to the City's Environmental Services Department and County of San Diego Department of Environmental Health for review prior to finalization and implementation. The comment also suggests the following text be added to the mitigation measure: "The Soil and Groundwater Disposal Plan shall be submitted to the appropriate regulatory agencies,

including the City's Environmental Services Department, for review prior to finalization and implementation."

The commenter does not specify which kinds of parameters or specifications should be added to mitigation measure **MM-HAZ-1(C)**, nor does the commenter indicate that the mitigation measure is deficient as currently written. **MM-HAZ-1(A)** requires that upon preparation of the Site Contamination Characterization Report, the project proponent shall also enroll in the Voluntary Assistance Program with the County of San Diego Department of Environmental Health, who would provide oversight and regulatory concurrence. However, **MM-HAZ-1(C)** has been revised for clarity:

A Soil and Groundwater Disposal Plan (Disposal Plan) shall be prepared following the Testing and Profiling Plan, which shall describe the process for excavating, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. The Disposal Plan shall be prepared in accordance with the Testing and Profiling Plan and shall adhere to applicable regulatory requirements and standards, including CA Title 22 Division 4.5, and DOT Title 40 CFR Part 263, CAC Title 27, and ensure compliance with applicable regulations for the disturbance, handling of contaminated materials, prevention of cross contamination, spills, or releases, such as segregation into separate piles for waste profile analysis based on organic vapor, and visual and odor monitoring. All excavation activities shall be actively monitored for the potential presence of contaminated soils and for compliance with the Disposal Plan. If disposal of contaminated soil or groundwater is required, it shall be done under the oversight of the County of San Diego Department of Environmental Health, which oversees hazardous materials issues in San Diego County.

These changes are reflected in Chapter 4, *Errata and Revisions*, of this Final EIR. Each component of mitigation measure **MM-HAZ-1** includes applicable performance standards and requirements. For example, the Sediment Contamination Characterization Report must be prepared consistent with the ASTM D5730-04 guidance, the DTSC *Preliminary Endangerment Assessment Guidance Manual*, and/or other similar guidance for industry standards. The Testing and Profiling Plan must be prepared to include protocols for independent testing of soils and materials identified for disposal for all potential contaminants of

concern, including CA Title 22 metals, PAHs, volatile organic compounds, pesticides, PCBs, semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. Parameters are established within the existing regulatory framework and with which the Soil and Groundwater Disposal Plan would comply. As laid out in **MM-HAZ-1**, the Soil and Groundwater Disposal Plan must be prepared in accordance with the Testing and Profiling Plan and must adhere to applicable regulatory requirements and standards, including CA Title 22 Division 4.5 *Environmental Health Standards for the Management of Hazardous Waste*, DOT Title 40 CFR Part 263 *Standards Applicable to Transporters of Hazardous Waste*, and CAC Title 27 *Environmental Protection, Division 2, Solid Waste*. Therefore, no further changes to the Draft EIR are required in response to this comment.

Response to Comment B-7

The comment suggests that Chapter 3, *Project Description*, does not need to identify a particular landfill when discussing recycling of construction debris, and notes there is not an "approval process." The comment suggests that the materials should not be taken to a landfill, but to an approved recycling facility.

The District would like to clarify the phrase "approved landfill." The phrase "approved landfill" does not mean that there is a specific approval process or approver of the landfill. Rather, approved landfills as discussed in the Draft EIR refer to landfills and disposal sites permitted by the California Department of Resources Recycling and Recovery, regulated by Title 27, California Code of Regulations. The following phrase in Chapter 3, *Project Description*, has been revised for clarity:

The construction waste generated from this demolition would be transported from the site and disposed of at an approved landfill. <u>An</u> approved landfill as discussed in the Draft EIR refers to landfills and disposal sites permitted by the California Department of Resources <u>Recycling and Recovery, regulated by Title 27, California Code of Regulations. A minimum of 65 percent of the c</u>Construction waste would be recycled in accordance with the City of San Diego Construction and Demolition Debris Ordinance.

This revision to the text is meant to clarify that all construction waste would be removed from the project site, and the proposed project

would comply with the City's Construction and Demolition Debris Ordinance. Construction waste that cannot be recycled would be disposed of at a solid waste landfill that is permitted to handle construction waste. These changes are reflected in Chapter 4, *Errata and Revisions*, of this Final EIR.

Response to Comment B-8

The comment states the recycling rate specified on page 3-31 of Chapter 3, *Project Description*, is not consistent with the 75 percent rate required by AB 341 and the City of San Diego Zero Waste Plan. The comment suggests that the 75 percent diversion of demolition debris is feasible if high value material is segregated at the site.

The recycling rate identified on page 3-31 of Chapter 3, *Project Description*, is referring to the recycling rate for construction waste, as established by the City of San Diego Construction and Demolition Debris Ordinance. Please see the response to comment C-5 for a comprehensive discussion of applicable solid waste diversion and recycling regulations. The comment does not provide any evidence that achieving a 75 percent diversion rate for demolition material is "feasible" based on the materials present at the project site, nor does it suggest a significant impact not analyzed in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment. The Draft EIR's conclusions regarding consistency with applicable waste regulations remain appropriate and accurate.

Response to Comment B-9

The comment recommends a Waste Management Plan be prepared for the project that includes management measures as conditions of the permit, or as part of the MMRP. The commenter suggests a key component of a Waste Management Plan is an estimate of the different types of waste the project would generate. The commenter recommends this information be included in the EIR to allow a proper understanding of the proposed project's solid waste impacts.

Please see the response to comment B-4, as it relates to the preparation of a Waste Management Plan. The comment does not identify a specific deficiency in the solid waste analysis in the Draft EIR, nor does it identify a potential impact related to solid waste. Therefore, no changes to the Draft EIR are required in response to this comment. Page 3 Mr. Peter Eichar August 17, 2020

B-9

cont.

B-10

A key component of a Waste Management Plan is an estimate of the volume or weight of different waste types to be generated, with each of the 13 project elements listed in Table 3-3 of the Draft EIR broken down into an estimate of what waste material types comprise the waste volumes provided in the table. An estimate of the volume or weight of different types of waste materials to be generated is also required as part of the City's C&D Ordinance. The City recommends that this information be provided in the EIR to allow a proper understanding and analysis of the project's solid waste impacts and how it can be appropriately mitigated. The City also recommends that the discussion on page 3-31 be revised as follows:

The construction waste generated from this demolition would be <u>segregated as</u> <u>appropriate to efficiently manage waste for recycling</u> transported from the site and <u>recycled_disposed of</u> at an approved recycling facility, as listed on the City of San Diego's <u>website_landfill</u> A Waste Management Plan has been prepared and the details are included in Chapter 6, Section 6.3.14, estimating the tonnage of waste types to be generated and how they will be segregated onsite, and estimating the overall waste <u>diversion rate to be attained</u>. A minimum of 75 65 percent of the construction waste and the demolition waste would be used onsite, salvaged, or <u>would be</u>recycled in accordance with the City of San Diego Construction and Demolition Debris Ordinance.

Project Description, page 3-31. The Project Description states that the waste sediment generated by the project will be "transported to an approved landfill." It does not specify who the approver of the landfill would be. Sediment should be included as a heavy waste product that will be generated at the site, and every effort should be made to achieve at least a 50 percent reduction of this difficult to manage material. To accomplish this diversion, sediment can be separated into: 1) sediments that have the potential to be re-used; 2) sediments that have no reuse potential but may be disposed of in a municipal solid waste landfill; and 3) sediments that mays to to hazardous waste disposal site. These details should be included in the proposed Soil and Groundwater Disposal Plan. Potential uses for sediments and soils include the following:

concrete manufacturing, beach replenishment, and soil brokers. To achieve waste reduction targets, projects typically specify the financial limit for waste reduction, for example by specifying a "cost not to exceed 5 percent more than disposal cost will be considered economically feasible." The City recommends the discussion on page 3-31 be revised as follows:

Sediments that are not contaminated will be part of the Waste Management Plan and a 50 percent waste reduction rate will apply for these materials. Similar to disposed of construction waste, eContaminated soils and dredged sediment that is not suitable for reuse generated by the proposed project-would be designated for upland disposal in a municipal solid waste or hazardous waste landfill, depending on the specific contamination materials and quantities, and transported to an approved landfills.

B-12
8. Table 3.3 does not include scrap metal, however the use of this material in the existing program could improve the overall waste diversion rate. A discussion of the project's use of scrap metal should be included in the discussion of waste management in Chapter 6 so that it is clear what the overall recycling rate will be.

8-13 9. Project Description, pages 3-31 and 3-32. The Draft EIR discusses an "approved landfill," but does not identify who the "approver" would be, and it does not discuss the different types of dredged materials that could be generated (i.e., reusable, contaminated, or not reusable but not requiring disposal in a hazardous waste facility). The City recommends the discussion on dredged materials be revised as follows:

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Response to Comment B-10

The comment suggests changes to the text on page 3-31 to say a Waste Management Plan has been prepared that includes estimating waste types, and stating a minimum of 75 percent of construction waste and demolition waste would be used on site, salvaged, or recycled.

Please refer to responses to comment B-4 regarding the request for a Waste Management Plan, and responses to comments B-5 and B-8 regarding the percentage of recycling and waste diversion applicable to the proposed project. The project proponent would divert all suitable material to be recycled in accordance with the City's Construction and Demolition Debris Deposit Ordinance and the City's Recycling Ordinance. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment B-11

The comment suggests every effort should be made to achieve at least 50 percent reduction of waste sediment, which can be accomplished by separating sediment into three categories: 1) sediment that has potential to be reused; 2) sediment that has no reuse potential but can be disposed of in a municipal solid waste landfill; and, 3) sediment that must go to a hazardous waste disposal site. The comment suggests that these details should be included in the Soil and Groundwater Disposal Plan.

Please see response to comment B-7 regarding the phrase "approved landfill." As described on pages 3-31 and 3-32 in Chapter 3, *Project Description*, the destination of the waste sediment that would be removed from the project site cannot be determined until the sediment has been removed, tested, and characterized consistent with applicable law. Dredged sediment that is determined to be suitable for aquatic ocean disposal would be transported to the LA-5 ocean disposal site. If the sediment is contaminated and therefore determined to be unsuitable for ocean disposal or reuse, the sediment would be dewatered, treated, and transported to an appropriately permitted landfill. In addition, dredged rock would be disposed of at a local recycling facility. It cannot yet be determined the exact amount of the potential sediment waste that would be suitable for upland and ocean disposal; however, to facilitate the analysis, estimates for each

applicable project element are provided in Section 3.4 of Chapter 3, *Project Description.* For Project Element 1 (Pride of San Diego Drydock Dredging and Moorage), it is estimated approximately 80 to 89 percent (up to approximately 87,900 cubic yards [cy]) of all dredged materials would be suitable for ocean disposal, while the remainder would require disposal at an appropriately permitted landfill. There are estimates for two scenarios for dredged material disposal for Project Element 4 (Pier 3 South Nearshore Dredging). The 50/50 Scenario assumes 50 percent of the dredged material (7,500 cy) would be suitable for ocean disposal and 50 percent (7,500 cv) would require upland disposal at an appropriately permitted landfill. The All-Truck Scenario assumes all dredged material (15,000 cy) for Project Element 4 would be disposed of at an upland landfill. The analysis assumes approximately 2,000 cy of dredged material from Project Element 6 and approximately 500 cy of dredged material from Project Element 7 would be disposed of upland at an appropriately permitted landfill.

Lastly, the comment suggests that the Soil and Groundwater Disposal Plan required under **MM-HAZ-1(c)** should include details regarding sediment disposal. However, the intent of this plan is to address the proper management and disposal of contaminated soil and/or groundwater encountered during landside construction activities. Rather, the handling and management of sediment is addressed under **MM-HAZ-3** (Implement a [Waterside] Sediment Management Program). **MM-HAZ-3** requires the project proponent to implement a (Waterside) Sediment Management Program that must contain: (A) SAP, (B) Marine Sediment Contamination Characterization Report, (C) Contaminated Sediment Management Plan, (D) In-Water Activity Specific Procedures, and (E) Post-Construction Sampling and Analysis. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment B-12

The comment suggests Table 3-3 does not include scrap metal and suggests that a discussion of the project's use of scrap metal should be included in Chapter 6.

Total landside demolition quantities for each applicable project element are included in Table 3-3 in Chapter 3, *Project Description*. As

noted in footnote 1 of Table 3-3, scrap steel generated during demolition and construction would be handled through the BAE Systems facility scrap recycling program and, therefore, is not accounted for in the volume of demolition disposal. This information is also included on page 6-16 in Chapter 6, Section 6.3.14.6, as it relates to landfill capacity, and therefore was accounted for in the solid waste impact analysis in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment B-13

The comment suggests the Draft EIR does not identify who the "approver" of "approved landfill" would be and does not discuss the different types of dredged materials that could be generated. The comment recommends the discussion on the text related to dredged materials should be revised to say that the sediment will be reused to the maximum extent possible, not to exceed 5 percent more than the cost of disposal.

Please see response to comment B-7. The waste sediment that would be removed from the project site would undergo testing and characterization to determine where the sediment would be disposed. Under Section 103 of the Marine Protection, Research and Sanctuaries Act, USACE issues permits authorizing ocean disposal of dredge material. USACE relies on EPA's ocean dumping criteria (40 CFR 220-229) to evaluate permit requests (EPA 2020). To determine the suitability of the dredged material for unconfined aquatic ocean disposal, BAE Systems would conduct a dredged material suitability study in consultation with the USACE and EPA as part of the Ocean Dumping Permit process under Section 103 of the Marine Protection, Research and Sanctuaries Act. Any dredged material that is determined to contain contaminated sediment would be unsuitable for ocean disposal or reuse, and would be disposed of at a permitted upland landfill (see page 3-32 of Chapter 3, Project Description). Sediment would not be stockpiled on site, and no dredge material is anticipated to be reused on site. Lastly, the commenter does not identify any inadequacies in the Draft EIR's analysis of potential impacts of the project, including with respect to hazardous materials management or waste disposal. Therefore, no changes to the Draft EIR are required in response to this comment.

San Diego Unified Port District

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B-13

cont

Up to approximately 15,000 cy of dredged materials from the Pier 3 South Nearshore Dredging (Project Element 4) would be tested for contamination and for suitability for reuse. To the maximum extent possible, not to exceed 5 percent more than the cost for disposal, the sediment will be reused. The remainder will be disposed of in ocean disposal, a municipal solid waste landfill, or a hazardous waste landfill, according to the specific characteristics of the materials, disposed of at an approved upland landfill, such as the Otay Landfill and/or Sycamore Landfill.40 The dredged materials would be placed in dredge scows for; no stockpiling on the site is proposed. Dredged material is dewatering anded, treatment, ed, and disposed of in accordance with existing permit and landfill Additionally, approximately 2,000 cy of material would be dredged beneath the Pier 3 break area as part of the Pier 3 North Lunchroom Wharf Replacement and Realignment (Project Element 6). The Quay Wall Modifications (Project Element 7) would also include dredging of 300 cy of rock, which would be disposed of at a local recycling facility, as well as 500 cy of sediment. The dredged sediment from both of these project elements would be tested for contamination and for suitability for reuse. To the maximum extent possible, not to exceed 5% more than the cost for disposal, the sediment will be reused. The remainder will be disposed of in ocean disposal, a municipal solid waste landfill, or a hazardous waste landfill, according to the specific characteristics of the materials. disposed of at an approved upland disposal site. Moreover, approximately 98,800 cy of material would be dredged as part of the Pride of

San Diego Drydock Dredging and Moorage Replacement (Project Element 1). Dredged materials from this project element are planned for ocean disposal at the LA-5 disposal site if suitable for unconfined aquatic ocean disposal. To determine the suitability of the dredged material for unconfined aquatic ocean disposal. To determine the suitability of the dredged material suitability study in consultation with the USACE and EPA as part of the Ocean Dumping Permit process. Any dredged material that is unsuitable for ocean disposal would be disposed of at an approved upland landfil (see discussion under Section 3.4.1)- tested for contamination and for suitability for reuse. To the maximum extent possible, not to exceed 5% more than the cost for disposal, the sediment will be reused. The remainder will be disposed of in ocean disposal, a municipal solid waste [andfil], or a hazardous waste landfil] (according to the specific characteristics of the materials, As discussed in Section 3.4.1, in the event that unconfined aquatic disposal is not suitable, only approximately 15.280 cy of the proposed 98,800 total cy of sediment would be dredged to comply with CAO No. R9-2012-0024.

10. Greenhouse Gas and Energy Section, Table 4.3-8, page 4.3-23.

B-14 a. **SW1, page 4.3-23.** The description of MM-GHG-2(B) beside SW1 is inconsistent with the language in MM-GHG-2(B). The City recommends that the description be revised to match the language in the mitigation measure. The City also recommends that revisions to the mitigation measure, as stated in the City's Comment #3, be included among the changes.

B-15
b. SW1, page 4.3-23. The description beside SW1 states that the project proponent should use "recycled, regional, and rapidly renewable materials where appropriate," in accordance with MM-GHG-2(E). The City recommends that a specific target, such as using 10% post-consumer content in building materials, be identified. This rate can be attained if heavier materials.

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Response to Comment B-14

The comment states in Table 4.3-8 on page 4.3-23 in Section 4.3, *Greenhouse Gas Emissions and Energy*, that the description of **MM-GHG-2** beside SW1 is inconsistent with the language in **MM-GHG-2** and should be revised. The comment also suggests the recommendations made in comment B-5 should be included in the revisions.

The language describing **MM-GHG-2** in Table 4.3-8 has been revised to match the language of **MM-GHG-2**, as follows:

Consistent (After Mitigation). **MM-GHG-2** requires the project proponent to use recycled, regional, and rapidly renewable materials where appropriate. In addition, the measure requires compliance with AB 341 and AB 939 (i.e., implementing a recycling program to support the statewide goal of diverting 75% of solid waste by <u>2020</u>recycling 75% of solid waste and recycling 65% of all construction and demolition debris), the City of San Diego Construction and Demolition Debris Deposit Ordinance, and the City of San Diego Recycling Ordinance.

These changes are reflected in Chapter 4, *Errata and Revisions*, of the Final EIR. Please also see the response to comments B-5, B-16, and B-19.

Response to Comment B-15

The comment recommends a specific target, such as using 10% postconsumer content in building materials, be identified. The comment states this can be attained if heavier materials—such as road base, concrete, or other materials—include post-consumer content, as is stated in the Draft EIR.

As the commenter states, **MM-GHG-2** includes the requirement that the proposed project would use recycled, regional, and rapidly renewable materials where appropriate during project construction. The commenter does not identify any inadequacies in the Draft EIR should this recommendation not be implemented.

MM-GHG-2 requires the project proponent to use recycled, regional, and rapidly renewable materials where appropriate during project

construction. This requirement is consistent with CAP Measure MP4, which requires that the District "encourage tenants to purchase goods and services that embody or create fewer GHG emissions." Through the measure requiring the project proponent to use recycled, regional, and rapidly renewable materials where appropriate, the District is ensuring consistency with CAP requirement to encourage tenants to purchase goods and services that create fewer GHGs. Likewise, CAP Measure SW2 identifies the District's adoption of a construction and demolition recycling ordinance could assist in achieving GHG reductions. While the District does not have such an ordinance, the City has an adopted Construction & Demolition Debris Deposit Ordinance, with which the proposed project must comply. Requiring the project proponent to use recycled, regional, and rapidly renewable materials where appropriate, while not expressly related to diversion of demolition materials associated with the project, is consistent with the intent of CAP Measure SW2. Therefore, no changes to the Draft EIR are required in response to this comment.

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B-15 cont	Ι	materials include post-consumer content, as is stated in the Draft EIR. This economically feasible target can be verified during pre-construction meetings where the MMRP is being monitored.
B-16	Ī	c. SW2, page 4.3-23. Please see the City's Comment #3 regarding recommended changes to MM-GHG-2(B). The description beside SW2 should be revised to reflect the changes to MM-GHG-2(B).
		d. SW3, page 4.3-23. AB 939 does not specifically address construction and demolition debris. The City recommends that MM-GHG-2(B) be revised per the City's Comment #3. The description beside SW3 should also be revised to reflect changes to MM-GHG-2(B).
B-17	11.	Effects Found Not to Be Significant, Section 6.3.14.6. The discussion of potential solid waste impacts is inconsistent with the discussion in the Greenhouse Gas Emissions and Energy section, which suggests that solid waste impacts could be significant if not mitigated. To support the conclusion that solid waste impacts are an "Effect Found Not to be Significant," the Project Description of the EIR should include a discussion on the proper management of project-generated waste materials and should include enforceable measures to manage waste materials as part of the permit conditions or MMRP.
B-18	1 2.	Section 6.3.14.6; page 6-16. The discussion in Section 6.3.14.6 states that the project will be served by a landfill with sufficient permitted capacity. However, the referenced landfill is the Otay Landfill, which is scheduled to close in 2028, and thus does not provide 15 years of capacity as specified in State law. Thus, this standard of sufficient landfill capacity would not be met, and the project would have a potentially significant solid waste impact. The discussion should be revised to more accurately discuss the actual services and facilities that are necessary and available for the project's solid waste management. Additionally, pursuant to State requirements, most waste must be composted, recycled, or otherwise diverted from disposal. Thus, the discussion should also reference composting and recycling facilities and compliance with State and local solid waste planning, pursuant to the CEQA Guidelines, as they are as important as disposal facilities.
B-19	1 3.	To address the potentially significant impacts associated with solid waste management, the District should prepare a Waste Management Plan. The District should coordinate with the City's Environmental Services. Department regarding the format and content of the Waste Management Plan. Additionally, it is recommended that the Waste Management Plan be included in the EIR to demonstrate that the proposed project would meet all of its solid waste obligations under State law and the City's C&D Ordinance, and would not cause a significant impact under CEQA.
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Thank you for the opportunity to provide comments on the Draft FIR. Please contact me directly if there are any questions regarding the contents of this letter or if the District would like to meet with City staff to discuss our comments. Please feel free to contact Rebecca Malone, Senior Planner, directly via email at RMalone@sandiego.gov or by phone at 619-446-5371

B-20 Sincerely,

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Alyssa Muto, Deputy Director Planning Department

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Response to Comment B-16

The comment suggests the description beside SW2 in Table 4.3-8 should be revised consistent with the recommendations of comment B-5. The comment also suggests AB 939 does not specifically address construction and demolition debris, so MM-GHG-2 and the description beside SW3 should be revised to reflect this.

The language beside SW2 in Table 4.3-8 is correct; it refers specifically to the City of San Diego Construction and Demolition Debris Deposit Ordinance, which is referenced in **MM-GHG-2**. This text applies specifically to SW2 – Adopt a Construction and Demolition Recycling Ordinance. Revisions to the discussion for SW2 in Table 4.3-8 have been made to provide clarity, as follows:

Consistent (After Mitigation). MM-GHG-2 requires the project to comply with the City of San Diego Construction and Demolition Debris Deposit Ordinance and divert construction and demolition debris from disposal in landfills and incineration facilities by 65%. Construction will use recycled, regional, and rapidly renewable materials where appropriate.

Comment B-5 refers to AB 341, which specifies the statewide goal of reducing operational solid waste by diverting 75 percent from landfills by 2020. Please see response to comment B-5. The description in Table 4.3-8 in the column next to SW3 has been revised to better reflect the applicable regulations.

Consistent (After Mitigation). Consistent with MM-GHG-2, the project proponent will be required to comply iance with AB 939, which requires recycling 50% of solid waste and diverting 65% of all construction and demolition debris AB 341, which requires commercial entities to implement recycling programs to support the statewide goal of diverting 75% of solid waste from landfills by 2020; and the City of San Diego Construction and Demolition Debris Deposit Ordinance and Recycling Ordinance.

These changes are reflected in Chapter 4, Errata and Revisions, of the Final EIR.
Response to Comment B-17

The comment indicates that the conclusion in Section 4.3, *Greenhouse Gas Emissions and Energy*, suggests solid waste impacts could be significant if not mitigated, and the EIR should include a discussion of the proper management of project-generated waste materials and enforceable measures to reduce waste as part of the permit conditions or the MMRP.

Section 4.3, *Greenhouse Gas Emissions and Energy*, of the Draft EIR notes that before mitigation the proposed project would be inconsistent with the District's CAP because it would not implement all relevant measures from the CAP, including measures consistent with state law designed to reduce waste and increase recycling. With the implementation of MM-GHG-1 through MM-GHG-3, the proposed project would implement strategies to reduce waste and increase recycling consistent with applicable state and local regulations, and therefore would be consistent with the CAP. The analysis in Section 4.3 does not identify a potential impact related to solid waste generated by the proposed project, only potential impacts related to consistency with the measures in the CAP related to the reduction of waste. This is consistent with the discussion of solid waste impacts in Chapter 6, Section 6.3.14, *Effects Found Not to be Significant*, of the Draft EIR, which explains why utilities and service systems impacts-including (1) whether the project is served by a landfill with sufficient permitted capacity and (2) whether the project would comply with federal, state, and local regulations related to solid waste—would not be significant. These analyses are wholly independent of the GHG and energy analyses presented elsewhere in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment B-18

The comment references the discussion in Section 6.3.14.6 and states that the referenced landfill, Otay Landfill, is scheduled to close in 2028 and would not provide the 15 years of capacity as specified in state law. The comment states that this could result in a significant impact related to solid waste. The comment suggests that the discussion in the Draft EIR should be revised to more accurately discuss the actual services and facilities that are available. The comment also states that most waste must be composted, recycled, or otherwise diverted from

landfills pursuant to state requirements and suggests that the discussion in the Draft EIR should include composting and recycling facilities.

The commenter does not identify the specific state laws that are referenced in the comment mandating that a landfill must have 15 vears of capacity remaining. State law AB 939 requires that local county agencies must prepare and implement Integrated Waste Management Plans, which must include a Siting Element (California Legislative Information 2020). The Siting Element must include a projection of the amount of disposal capacity that will be needed to accommodate the solid waste generated within the local jurisdiction for a 15-year period. The San Diego County Integrated Waste Management Plan Countywide Summary Plan contains the Countywide Siting Element, which outlines a combination of strategies, including existing, proposed, and tentative landfills or expansions, increased diversion efforts, and out-of-county transport of solid waste, to serve all jurisdictions in the County for at least 15 years of disposal capacity (San Diego County 2005). The August 2017 Five-Year Review Report, approved by CalRecycle in 2018, updated the planning for 15 years of county wide landfill disposal capacity (CalRecycle 2018). The Five-Year Review Report provides estimates for available landfill capacity within San Diego County for the state-mandated 15-year period, with the last permitted landfill in the county projected to close in 2059. The Five-Year Review Report indicates, given several different possible scenarios, that the County of San Diego has sufficient landfill capacity to accommodate disposal for the next 15 years. Given this conclusion, there would be sufficient capacity for disposal of solid waste generated by the proposed project in the 15-year timeframe, at a permitted landfill in the region. Moreover, construction of the proposed project is expected to be completed by 2026, and—as discussed under response to comment B-5—none of the operational changes associated with the proposed project would generate new sources of solid waste that would require disposal at a landfill because the proposed project would not increase the number of employees at the site compared to existing conditions. As such, the project site would continue to operate as a ship repair vard following implementation of the proposed project.

Throughout the Draft EIR, Otay Landfill is provided as an example of a permitted upland disposal facility. The Draft EIR does not identify a specific landfill that would receive general construction and

operational project-generated waste. As discussed in Section 6.3.16.6, construction waste generated from demolition would be transported from the site and disposed of at an approved upland disposal facility (e.g., Miramar or Otay Landfill). The project proponent would dispose of any solid waste at a permitted landfill capable of accepting this waste. Otay Landfill is identified as the disposal location for any dredged sediment designated for upland disposal because it is capable of accepting contaminated sediment; however, all other solid waste generated by the proposed project would be disposed of at whichever landfill is capable of accepting such waste. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment B-19

The comment suggests the District should prepare a Waste Management Plan to address potentially significant impacts and coordinate the content of such plan with the City's Environmental Services Department. The comment also recommends the Waste Management Plan is included in the EIR to demonstrate the proposed project meets its obligations under City and state law.

Please see responses to comments B-4 and B-9 regarding the request to prepare a Waste Management Plan. The Draft EIR includes a description of solid waste that would be generated by construction of the proposed project in Table 3-3 of Chapter 3, *Project Description*. An analysis of construction and operational solid waste as it relates to GHG emissions and consistency with the District's CAP is provided in Section 4.3, *Greenhouse Gas Emissions and Energy*. Moreover, the Draft EIR includes an analysis of both construction and operational solid waste impacts in Section 6.3.14 of Chapter 6, *Additional Consequences of Project Implementation*. As detailed in Chapter 6, all impacts related to solid waste would be less than significant.

Please also see responses to comments B-5, B-8, and B-13 regarding the proposed project's compliance with existing City and state regulations pertaining to solid waste and recycling.

Considering the features of the proposed project, including implementation of the aforementioned procedures for disposing of project-generated waste, compliance with the listed regulations, and no significant change in operational waste, the proposed project would not

result in significant impacts related to solid waste. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment B-20

The comment letter states that the City appreciates the opportunity to comment on the Draft EIR and concludes by providing the City's contact name and information.

The District appreciates the City's interest in the proposed project. This comment does not raise any environmental issues needing a response pursuant to CEQA.

5.3.3 Comment Letter C: County of San Diego Department of Environmental Health

Comment Letter C



5570 OVERLAND AVENUE, SUITE 102, SAN DIEGO, CA 92123 Phone: (859) 694-2888 Fax: (859) 571-4268

www.SDVector.com

AMY HARBERT

August 17, 2020

San Diego Unified Port District Attn: Peter Eichar Development Services Department 3165 Pacific Highway San Diego, CA 92101-1128

Via e-mail to: peichar@portofsandiego.org

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE BAE SYSTEMS WATERFRONT IMPROVEMENT PROJECT

Dear Mr. Eichar,

C-1

C-3

Thank you for the opportunity to comment on the draft Environmental Impact Report for the above referenced project. The County of San Diego Vector Control Program (VCP) is responsible for the protection of public health through the surveillance and control of mosquitoes that are vectors for human disease including West Nile virus (WNV). The VCP has completed their review and has the following comments regarding the proposed project.

The VCP respectfully requests that the project design features address potential impacts from possible mosquito breeding sources created by the project and that the project is constructed in a manner to minimize those impacts. Specifically, ensure construction-related depressions created by grading activities, vehicle tires, ditches, and landscaping do not result in depressions that will hold standing water. In addition, ensure drainage areas and other structures do not create a potential mosquito breeding source. Any area that is capable of accumulating and holding at least ½ inch of water for more than 96 hours can support mosquito breeding and development.

2. Please note, the VCP has the authority pursuant to state law and County Code to order the abatement of any mosquito breeding that does occur either during construction or after the project is completed that is determined to be a vector breeding public nuisance. The VCP will exert that authority as necessary to protect public health if the project is not designed and constructed to prevent such breeding.

"Environmental and public health through leadership, partnership and science"

Response to Comment C-1

The comment is an introductory comment providing background on County of San Diego (County) Vector Control Program. The County notes that is has reviewed the Draft EIR and is providing comments for consideration.

The District appreciates the County's interest in the proposed project. This comment is an introductory comment and does not raise any environmental issues requiring a response pursuant to CEQA. The specific comments raised following this introduction are listed separately, along with the District's individual responses.

Response to Comment C-2

The comment requests that the project design features address potential impacts from possible mosquito breeding sources created by the project and that project construction occurs in a manner that minimizes those impacts. The comment provides specific recommendations for reducing mosquito breeding.

Based on the thresholds established by the County of San Diego Guidelines for Determining Significance for Vectors, the proposed project would not include any features that would substantially increase human exposure to vectors capable of spreading disease, including: proposing a vector breeding source, including standing water for more than 72 hours, composting or manure, or confined animal facilities; or resulting in a substantial increase in the number of residents located within 0.25 mile of a significant existing offsite vector breeding source. The proposed project does not include any elements that could be a vector breeding source during construction or operation. In addition, the proposed project would be required to comply with the San Diego County Code of Regulatory Ordinances— Vector Control chapter, which addresses general vector control, and the San Diego County Code of Regulatory Ordinances—Stormwater and Discharge Control chapter, which specifies that BMPs must be designed to drain within 72 hours to preclude mosquito breeding. During construction, the proposed project would implement standard BMPs such as, but not limited to, covering open excavation pits or trenches

when not actively excavating in the area. After construction, operation of the proposed project would result in increased operational efficiencies but would not result in new or different activities than currently occur on the project site. Therefore, the proposed project would not introduce new sources of vector breeding, nor would it exacerbate existing conditions that contribute to vector breeding. In addition, the project would not result in increased human exposure to vectors. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment C-3

The comment states that the County Vector Control Program has authority pursuant to state law and County Code to order the abatement of mosquito breeding that occurs during and after project construction.

The District understands that the County Vector Control Program has authority pursuant to state law and County Code to order the abatement of mosquito breeding that occurs during and after project construction. The comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment. However, the proposed project would comply with all applicable laws and regulations related to vector control.

San Diego Unified Port District

Mr. Eichar August 17, 2020 San Diego Unified Port District

 For your information, the County of San Diego Guidelines for Determining Significance for Vectors can be accessed at

http://www.sandiegocounty.gov/content/dam/sdc/pds/docs/vector_guidelines.pdf and the California Department of Public Health Best Management Practices for Mosquito Control in California is available at https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/MosquitoesandMosquitoBorneDiseas

The VCP appreciates the opportunity to participate in the environmental review process for this project. If you have any questions regarding these comments, please contact Daniel Valdez at 858-688-3722 or by e-mail at Daniel.Valdez@sdcounty.ca.gov.

C-5 Sincerely,

C-4

Palense

es.aspx#

DANIEL VALDEZ, Registered Environmental Health Specialist Vector Control Program

Response to Comment C-4

The comment provides links to the County of San Diego Guidelines for Determining Significance for Vectors and the California Department of Public Health Best Management Practices for Mosquito Control in California.

The comment provides links to additional information regarding vectors, including mosquitos. However, the comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment C-5

The comment states that the County of San Diego Vector Control Program appreciates the opportunity to comment on the Draft EIR and concludes by providing the County's contact name and information. The District appreciates the County of San Diego Vector Control Program's interest in the proposed project. This comment does not raise any environmental issues needing a response pursuant to CEQA.

5.3.4 Comment Letter D: San Diego County Regional Airport Authority

Comment Letter D







From: Gowens Ed <egowens@san.org> Sent: Wednesday, July 8, 2020 5:06 PM To: Peter Eichar cpeichar@portofsandiego.org> Cc: Redman Ralph <rredman@san.org>; Hollarn Garret <ghollarn@san.org>; Noyce Sidney <snoyce@san.org> Subject: Rc: BAE Systems Waterfront Improvement Project Draft EIR Notice of Availability

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Mr Eichar:

D-1 As the Airport Land Use Commission (ALUC) for San Diego County, the San Diego County Regional Airport Authority (SDCRAA) appreciates being included in the distribution of the Notice of Availability of a Draft Environmental Impact Report (EIR) for the BAE Systems Waterfront Improvement Project.

ALUC staff has reviewed the content of the Draft EIR and concurs with the analysis that the project site lies outside the noise contours and safety zones of the San Diego International Airport (SDIA)
 Airport Land Use Compatibility Plan (ALUCP), and therefore has no significant impacts in noise or safety hazards for which mitigation would be required. The project site is located within only the airspace protection surfaces (Review Area 2) of SDIA. Overflight notification does not apply since it is not a residential project.

The Draft EIR acknowledges that a Determination of No Hazard to Air Navigation will be obtained from the Federal Aviation Administration (FAA) prior to the construction of the project's aboveground components, and so long as that measure is complied with, and the FAA issues such

D-3 ground components, and so long as that measure is compiled with, and the FAA issues such determination with no conditions for marking and lighting of its component structures, the project requires no further action from the ALUC for a consistency determination. If, however, the FAA determines that marking and lighting conditions are required for the project, submittal to the ALUC

Response to Comment D-1

The comment is an introductory comment stating that the Airport Land Use Commission (ALUC) of the San Diego County Regional Airport Authority appreciates being included on the Notice of Availability for the Draft EIR.

The District appreciates the ALUC's interest in the proposed project. This comment is an introductory comment and does not raise any environmental issues requiring a response pursuant to CEQA. The specific comments raised following this introduction are listed separately, along with the District's individual responses.

Response to Comment D-2

The comment indicates that ALUC has reviewed the Draft EIR, concurs with the analysis that the proposed project lies outside of the noise and safety contours of the San Diego International Airport's Airport Land Use Compatibility Plan, and agrees that the project therefore would not result in any significant noise or safety hazard impacts requiring mitigation. The comment also notes that the project site is only within the airspace protection surfaces (Review Area 2) for the San Diego International Airport, and that overflight notification does not apply to the project.

This comment restates the analysis and conclusions from the Draft EIR but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment D-3

The comment indicates that the proposed project would not require any further action from the ALUC for a consistency determination so long as the project obtains a Determination of No Hazard to Air Navigation from the Federal Aviation Administration (FAA) with no conditions for marking and lighting of the project components, as noted in the Draft EIR. The comment also states that a consistency

determination from the ALUC would be required if the FAA determines that marking and lighting conditions are required for the project.

This comment restates information from the Draft EIR but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment. However, as stated in the comment, the proposed project would be required to comply with all FAA and ALUC (as applicable) requirements. D-3 for a consistency determination to reinforce that standard would be required, since the FAA has no land use authority.

The Draft EIR correctly alludes to an ALUCP for Naval Air Station North Island (NASNI) currently being developed by SDCRAA as the ALUC. The Draft EIR for the NASNI ALUCP was recently circulated in public review that ended, with extension, in March of this year. The content of the proposed NANSI ALUCP indicates that the project site would not be within its noise contours or safety zones, so no

D-4 significant impacts to noise or safety hazards would be anticipated by the project to that airport as well. The project site does lie within the airspace protection surfaces of NASNI as with SDIA, and securing the FAA determinations prior to project construction would automatically include airspace review of both airports by the FAA. The same standards for FAA marking and lighting of structures would apply as stated above, and if the FAA determination requires no such condition, no referral to the SDCRAA as the ALUC for a consistency determination with the prospective NASNI ALUCP to be adopted would be required either.

Thanks again for the notice and opportunity to provide comment on the BAE Systems Waterfront Improvement Project.

Regards,

Ed Gowens

D-5

Senior Airport Planner Airport Land Use Commission San Diego County Regional Airport Authority Post Office Box 82776 San Diego, California 92138-2776 voice (619) 400-2244

All correspondence with this email address is a matter of public record subject to third party review.

Is it worth a tree to print me?

From: Peter Eichar <<u>peichar@portofsandiego.org</u>> Sent: Thursday, July 2, 2020 7:53 AM To: Peter Eichar <<u>peichar@portofsandiego.org</u>> Subject: BAE Systems Waterfront Improvement Project Draft EIR is available for a 45-day public

review period - Notice of Availability

Notice is hereby given that the **San Diego Unified Port District (District)**, as lead agency under the California Environmental Quality Act, has prepared a Draft Environmental Impact Report (EIR) for the BAE Systems Waterfront Improvement Project (Project). The Draft EIR is available for a 45-day public review period. This notice is intended to notify agencies and members of the public that may be interested in the Project as to availability of the Draft EIR, and procedures for public review and comment on the Draft EIR.

Response to Comment D-4

The comment provides background information on the status of the Airport Land Use Compatibility Plan for Naval Air Station North Island and states that the project site is not within the noise contours or safety zones of the draft Airport Land Use Compatibility Plan. As a result, the comment indicates that the proposed project would not result in any significant noise or safety hazard impacts for Naval Air Station North Island. The comment notes that the project site is within the airspace protection surfaces for Naval Air Station North Island and therefore is subject to the same FAA and ALUC requirements described under comment D-3.

This comment restates information from the Draft EIR but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment. However, as stated in the comment, the proposed project would be required to comply with all FAA and ALUC (if applicable) requirements.

Response to Comment D-5

The comment thanks the District for the opportunity to comment on the Draft EIR and concludes by providing ALUC's contact name and information.

The District appreciates ALUC's interest in the proposed project. This comment does not raise any environmental issues needing a response pursuant to CEQA.

Availability of Draft EIR: The Draft EIR can be viewed online at www.portofsandiego.org/environment/environmental-downloads/land-use-planning.html

Public Comments on the Draft EIR: The Draft EIR is available for a 45-day public review period that starts on July 2, 2020 and ends at 5:00 p.m. on August 17, 2020. Comment letters stating specific environmental concerns with the Draft EIR should be mailed to: San Diego Unified Port District, Attn: Peter Eichar, Development Services Department, 3165 Pacific Highway, San Diego, CA 92101-1128 or emailed to peichar@portofsandiego.org. Comments must be received by 5:00 p.m. on August 17, 2020.

Please see the attached Notice of Availability for additional information.

Peter Eichar, AICP Senior Planner Development Services

3165 Pacific Highway, San Diego, CA 92101 (o) 619.686.6284 (m) 619.380.0928



connect: 0000000

Port administration offices are open Monday-Thursday and every other Friday from 8am-5pm.

BAE Systems Waterfront Improvement Project Final Environmental Impact Report

5.3.5 Comment Letter E: Environmental Health Coalition

Comment Letter E

ENVIRONMENTAL 40 2227 HOOVER AVE., SUITE 202 | NATIONAL CITY, CA. 91950 | (619)474-0220 | ENVIRONMENTALHEALTH ORG

August 17, 2020

San Diego Unified Port District, Development Services Department Attn: Peter Eichar Via email to: <u>peichar@portofsandiego.org</u>

Re: Comments on Draft EIR for BAE Systems Waterfront Improvement Project (UDP #EIR-2018-197)

Dear Mr. Eichar:

E-1

F.2

E-3

E-4

Environmental Health Coalition (EHC) appreciates the opportunity to review the draft Environmental Impact Report (DEIR) for the BAE Systems Waterfront Improvement project (Project). While EHC generally supports operational and/or structural efficiencies that could reduce pollution, the Port needs to require more aggressive measures to protect the adjacent and disadvantaged (environmental justice) Portside communities. Due to its proximity to these communities (i.e., Barrio Logan) that already have some of the highest pollution burdens in the state or what can be sometimes referred to as "diesel death zones", it is important that the Project not worsen the current environmental situation. This should be clearly articulated as one of the project objectives. One of the main ways to achieve this is through further electrification of fossil-fuel powered equipment and operations. Also, please note that, the nearest potential sensitive receptors could be located just 785 feet away, given the current zoning allowances, therefore this impact should be analyzed as well. EHC offers the following comments and recommendations for your consideration.

Project Objectives

- The DEIR states the following as one of its objectives: "Enhance worker safety, customer security, and environmental protection programs through the integration of relevant project elements." It is not clear what environmental protections programs this objective is specifically referring to. Please list the programs and clarify.
- EHC recommends the following additional revisions to this objective: "Enhance worker safety, customer security, and environmental protection programs through the integration of relevant project elements. <u>Ensure that the local portside communities are not affected by any new sources</u> of pollution from this project.

Air Quality

 Level of Significance. EHC recommends using a threshold of zero. CEQA Guidelines recognize that the level of impacts and the significance depends upon a multitude of factors such as *project setting*, design, construction, etc. CEQA Guidelines also call for careful judgment based on

> EMPOWERING PEOPLE. ORGANIZING COMMUNITIES. ACHIEVING JUSTICE. Empoderando a la gente. organizando las comunidades. Logrando la Justicia.

Response to Comment E-1

The comment is an introductory comment stating that Environmental Health Coalition (EHC) appreciates the opportunity to review the Draft EIR for the proposed project. The comment notes that EHC generally supports efficiencies that could reduce pollution but suggests that more aggressive measures are needed to protect the adjacent and disadvantaged (environmental justice) portside communities. The comment also suggests that, due to the proposed project's proximity to these communities, one of the project objectives should be to not worsen the current environmental situation. The comment further suggests that one way to achieve this is through further electrification of fossil-fuel-powered equipment and operations. Lastly, the comment suggests that the closest potential sensitive receptors could be located 785 feet way, given the current zoning allowances, and that this impact should be analyzed as well. The comment notes that EHC is providing comments for consideration.

The District appreciates EHC's interest in the proposed project. It is noted that this comment summarizes several comments that are also stated again further on in the comment letter. Thus, the individual comments are listed below, and the District's corresponding responses follow.

Response to Comment E-2

The comment restates the following project objective (Project Objective #3) from the Draft EIR: "Enhance worker safety, customer security, and environmental protection programs through the integration of relevant project elements." The comment requests clarification on what environmental protection programs the project objective is referring to.

The proposed project would incorporate many existing environmental protection programs that have been developed either at the state and regional level or at the local level by the District and member cities, as well as site-specific plans BAE Systems has developed. These environmental protection programs are discussed throughout the Draft EIR, within the environmental resource sections which they pertain. As

described in Chapter 3, Project Description, the proposed project would be categorized as a Priority Development Project and would be subject to permanent BMPs, per the District's *BMP Design Manual* and as required by the Municipal Stormwater Permit. A Stormwater Quality Management Plan for Priority Development Projects that identifies and supports the use of permanent structural BMPs, as appropriate, is also required. A Construction BMP Plan would also be developed as part of the proposed project, outlining the specific BMPs that would be implemented during construction. The Construction BMP Plan would be approved by the District prior to commencement of construction activities. Components of the plan include BMPs to eliminate or reduce pollutants in stormwater runoff and non-stormwater discharges from the project site during construction. The plan includes the following types of construction BMPs: erosion management, material pollution control, sediment control, soil stabilization, tracking control, wind erosion control, waste management, and spill prevention and control. The BAE Systems San Diego Ship Repair Yard operates and maintains a Stormwater Diversion System to eliminate or reduce stormwater discharges to surrounding receiving waters (i.e., San Diego Bay). The relevant proposed project elements would incorporate existing BMPs, including the Stormwater Diversion System, or modify/develop project specific BMPs, as appropriate. In addition, BAE Systems' 2018 Sustainability Booklet (Exhibit 4) identifies programs in emissions reductions, waste reduction, water conservation and water quality protection, green transportation, biodiversity, and energy efficiency.

As described in Section 4.2, *Biological Resources*, the proposed project would also be consistent with the San Diego Bay Integrated Natural Resources Management Plan, which the District and the U.S. Navy jointly implement to guide planning, management, conservation, restoration, and enhancement of the Bay.

As described in Section 4.3, *Greenhouse Gas Emissions and Energy*, the proposed project would incorporate energy efficiency design features that meet or exceed 2019 Title 24 California Building Energy Efficiency Standards (or the Building Energy Efficiency Standards in effect at the time of building permit application). These measures may include high performance glazing, increased insulation, cool roofs with an R value of 30 or better, or programmable thermostats, and they would reduce energy demand. In addition, BAE Systems' 2018 Sustainability Booklet identifies various programs related to emissions reductions, resource

consumption reductions, and investments in clean equipment, including installing two electric cranes at the drydock, installing an electric crane at Pier 4, using an electric vehicle for movements around the yard, and purchasing an electric drayage truck for material movements. This comment requests greater clarity in the proposed project's participation in environmental protection programs but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment E-3

The comment recommends that Project Objective #3 be revised to include: "Ensure that the local portside communities are not affected by any new sources of pollution from this project."

While the suggested edit is a general goal of the District when considering any new project, the suggestion is related to potential indirect effects of the proposed project, not a direct objective of the proposed project. The statement of objectives should include the underlying purpose of the particular proposed project (State CEQA Guidelines Section 15124(b); In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1163). Therefore, each project will have different project objectives. Project Objective #3 and the other project objectives have been vetted through the District and the project proponent and reflect the underlying purpose of the proposed project. Additionally, the rationale and justification for the proposed project, as well as the context for the purpose and objectives of the proposed project, are explained in Sections 3.1 and 3.2 of Chapter 3, Project Description. For further discussion and analysis of potential new sources of pollution that may affect communities adjacent to the project site, please see Sections 4.1 through 4.9 and Chapter 6 of the Draft EIR. No additional objectives need to be added. The comment recommends an amendment to an existing project objective but does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment E-4

The comment recommends that an air quality threshold of zero be used in the EIR analysis given the cumulative emissions burden in the project area.

Pages 4.1-19 to 4.1-24 of the Draft EIR provide a thorough discussion to substantiate use of the thresholds selected, which are thresholds adopted by the County and widely applied to ensure that the region attains and maintains air quality standards and that localized impacts are disclosed wherever present. The Draft EIR outlines why the thresholds used are supported by substantial evidence, including that the thresholds used are based on the Air Quality Impact Analysis (AOIA) Trigger Levels within San Diego Air Pollution Control District Rules for New Source Review (Rules 20.2 and 20.3). These AQIA trigger levels are designed to facilitate achievement of federal and/or state ambient air quality standards, which represent the allowable atmospheric concentrations at which the public health and welfare are protected.³ The San Diego Air Pollution Control District is responsible for enforcing the rules and regulations to protect air quality and achieve federal and state standards, including the AQIA. For purposes of CEOA analysis, the County's air quality analysis guidelines, which are based on the AQIA and other air quality rules, conclude that no further analysis is typically required for projects or sources with emissions below these criteria and that project-level emissions are presumed to be less than significant. For projects or sources that exceed these criteria, further analysis may be required. The Draft EIR explains that both construction and operational emissions would be significantly less than applicable thresholds. For PM10 and PM2.5 in particular, construction and operational emissions would be substantially below applicable thresholds and, in fact, would approach near-zero amounts on a daily basis.⁴ Operationally, the project is anticipated to generate no greater than 1 pound *per day* of both PM10 and PM2.5, which is far below the thresholds of 100 and 55 pounds per day, respectively. It is

³ <u>https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf</u> (San Diego County 2007).

⁴ Per Table 4.1-10, the highest PM10 and PM2.5 daily emissions are 9 and 8 pounds per day, respectively, and the thresholds are substantially higher at 100 (PM10) and 55 (PM2.5) pounds per day. It should also be noted that the estimated emissions amounts reflect a conservative construction scenario, which assumes overlapping construction of Project Elements 1 and 2, although the expected overlap would be extremely brief. Without such overlap, daily construction emissions would be less because of less construction activity.

important to note that the daily emissions reflected in Table 4.1-11 reflect the absolute highest daily emissions increase that could result from the project, particularly for a day on which there is a vessel call. However, as the Draft EIR explains, the project will decrease the total number of vessel calls on an annual basis, therefore resulting in an annual *decrease* in emissions. The annual decrease in emissions also occurs within the context of the BAE Systems shipyard operations, which continue to decline due to the introduction of emissions-reducing actions, including installing electric cranes instead of diesel-powered cranes.⁵

It should also be noted that, specific to particulate matter (PM), the thresholds that are used in the Draft EIR are more restrictive than thresholds in other areas of the state with worse air quality than the San Diego region.

For example, the San Diego region is designated as attainment for both federal PM10 and PM2.5 standards and nonattainment for state PM10 and PM2.5 standards. The South Coast Air Basin is designated as serious nonattainment for federal PM2.5 standards, is a serious maintenance area for federal PM10, and is designated as nonattainment for state PM10 and PM2.5 standards. Ambient air quality values in the South Coast Air Basin are typically much higher than values for the San Diego region. For instance, over the past 3 years, the highest average annual concentration in the San Diego region was 31 micrograms per cubic meter ($\mu g/m^3$) (in 2019), while the highest average annual concentration in the South Coast Air Basin was 58.2 μ g/m³, or 85 percent higher than the San Diego maximum concentration. However, despite the air quality being much worse in the South Coast Air Basin, thresholds for many pollutants are not more restrictive. For example, the PM10 threshold used in this EIR was 100 pounds per day, while the PM10 threshold for both construction and operational projects in the South Coast Air Basin is 150 pounds per day. Similarly, the PM2.5 threshold for both areas is 55 pounds per day despite the South Coast Air Basin having much worse air quality. Even though conservative (restrictive) thresholds are used to evaluate potential impacts from the proposed project, the proposed project would result in emissions below both PM10 and PM2.5 thresholds and

⁵ See BAE Systems' 2018 Sustainability Booklet (Exhibit 4) (BAE Systems 2018).

therefore would result in less-than-significant impacts on air quality without mitigation measures required.

The analysis in the EIR is conservative because it assumes a substantial amount of activity would occur on a given day. Again, despite this conservative analysis, the proposed project would not result in cumulatively considerable net increase of any criteria pollutant for which the project region is designated as nonattainment under an applicable federal or state ambient air quality standard, including PM.

The issue of cumulative pollution burden and diesel exhaust is discussed in Threshold 3 of Section 4.1, *Air Quality and Health Risk*, of the Draft EIR. As discussed in Section 4.1, while the project would emit diesel exhaust within the project area and along truck and vessel travel routes, health effects associated with these emissions is expected to be minimal because the project area is over 0.25 mile from the nearest residences, travel along truck routes would be intermittent and short-term in nature, and vessel travel to tow materials to ocean disposal would be far from sensitive uses and receptors. Therefore, health effect impacts on the community would be minimal and any contribution of emissions to the cumulative pollution burden would be well below thresholds.

As discussed in Section 4.1 and as displayed in Table 23 of Appendix C (page 162/620 of Volume II), long-term emissions associated with shipyard operations would decrease on an annual basis compared to existing operations due to the decrease in activity (e.g., reduced tug activity and vessel calls) and increased operational efficiency. This would reduce the pollution burden in the neighborhood and San Diego region over the life of the project compared to existing shipyard operations.

The District has exercised its discretion to use the thresholds of significance stated in the EIR rather than the "zero" threshold proposed by EHC. Therefore, no changes to the Draft EIR are required in response to this comment.

E-4

E-5

E-6

scientific and factual data to the extent possible and explain, "For example, an activity which may not be significant in an urban area may be significant in a rural area." (§ 15064(b)) Similarly, emissions of 100 lbs. per day of particulate matter upwind of Barrio Logan - an urban low-income community of color already determined by CalEPA to be among the highest in the state for cumulative pollution burden - could potentially be more significant than 100 lbs. per day of particulate matter in, for example, the middle of the desert with no nearby sensitive receptors. Any increase in emissions is significant in this community, the threshold of significance for this project for criteria air pollutants should be zero. A threshold of zero would take into account these location-specific conditions:

- the entire air basin already has a status of basic non-attainment for the federal (NAAQS) ozone standard and non-attainment for the state (CAAQS) standards for ozone, PM10 and PM2.5.
- the project location is in an area with particularly high cumulative pollution burden as identified by California Environmental Protection Agency;
- the project location is in an area with high levels of diesel pollution; and
- health impacts in the community adjacent to the project could be exacerbated, resulting in additional significant impacts.

Therefore, EHC recommends that Port staff work with EHC and other stakeholders (such as the Barrio Logan Community Planning Group) to develop a plan to incorporate the following measures to mitigate the Project's construction and operational air quality impacts:

- a. electrified equipment in place of diesel powered equipment for all phases of construction and operation of the project;
- b. electric or hybrid electric tugboats in place of diesel powered tugs;
- c. zero emission vehicle (ZEV) trucks used for project construction related activities to ensure a certain percentage are zero-emission at the start of construction and an increased percentage by completion of construction activities:
- d. subsidies for alternative transportation for workers, not just for construction;
- compliance with the Barrio Logan truck route; and, e. f.
- vessel speed reduction for all ships coming to or leaving BAE.

Greenhouse Gases

1. The DEIR's Table 4.3-8 (Consistency with Applicable District CAP Measures for 2020) outlines Project consistency with the applicable Port District Climate Action Plan (District CAP) measures. EHC disagrees with the DEIR's statement that the Project would be consistent with District CAP measure TA2. Per Table 4.3-8, TA2 states the following: "Support and promote non-Port-owned vehicles and vessels to achieve the lowest emissions possible, using a mix of alternative fueled, electric, or hybrid technology." The DEIR in Table 4.3-8 subsequently states that the project is

1 http://www.oehha.ca.gov/ej/ces2.html

Response to Comment E-5

The commenter recommends various mitigation measures be incorporated to mitigate the project's construction and operational air quality impacts.

The comment recommends measures to reduce air quality impacts. However, because no significant construction or operational air quality impacts are identified in the Draft EIR, no mitigation measures specific to air quality are required.

However, it should be noted that BAE Systems has and continues to implement emissions-reduction technologies throughout its leasehold. BAE Systems has, for instance, reduced PM emissions through investment in electrical equipment. BAE Systems has installed two electric cranes rather than diesel-powered cranes at the Pride of California Dry Dock and an electric crane at Pier 4. BAE Systems also uses electric cars and an all-electric truck, installed a heavy-duty vehicle charging station, replaced diesel fuel forklifts with propane forklifts, provides a shuttle for employee parking and encourages carpooling, and has electrified the Pride of San Diego dry dock for docking and undocking evolutions (completed in 2016). Additionally, BAE Systems owns and operates 68 fleet vehicles, 21 (31%) of which are zero-emission electric vehicles. Lastly, BAE Systems recently began encouraging all subcontractors to use electric compressors within the BAE Systems leasehold.

Also, CARB regulations applicable to trucks, particularly the Truck and Bus Regulation which requires the implementation of clean air trucks in accordance with an adopted schedule, also serve to reduce area emissions through cleaner truck engines. For instance, the Truck and Bus Regulation requires that all trucks and buses, including drayage trucks, be equipped with 2010 or newer model year engines by January 1, 2023. CARB recently adopted a final Advanced Clean Trucks Regulation, which accelerates the production of on-road zero-emission trucks for use in the marketplace. Consistent with its responsibilities under state law, which mandates that CARB adopt rules and regulations to reduce GHG emissions and improve air quality while considering technology feasibility and cost-effectiveness, CARB's rulemaking sets timelines for the rollout of zero-emission vehicles based on feasibility and cost-effectiveness considerations. CARB notes

that the technology is not available to suit all needs due to limitations in existing technology, but as electric vehicle technology advances, zero-emission trucks will become suitable for more applications.⁶ Therefore, CARB's rule reflects a determination of what is feasible in terms of vehicle fleet upgrades considering manufacturer capacity and user economics.⁷ The technology gap in zero-emission trucks was highlighted when BAE Systems conducted an all-electric zero-emission truck demonstration during the 2017 to 2019 timeframe. That demonstration revealed several challenges—including reliability, lack of mechanical professionals with experience repairing electric trucks, and difficulty meeting shipyard needs—that limited that truck's use for the demonstration period only. BAE Systems will continue to adhere to all applicable CARB regulations, which will further contribute to a reduction in local and regional emissions over the life of the proposed project (beyond the annual operational emissions reductions created by the project itself).

The commenter suggests that electrified equipment be used in place of diesel equipment for all phases of construction and operation of the project. As noted above, BAE Systems is implementing measures to electrify its operations and decrease reliance on diesel-powered equipment. These measures have resulted in decreases in PM emissions on an annual basis. Also, the proposed project would actually result in a *reduction* of operational PM emissions annually. With respect to construction, the project's emissions would be far below applicable thresholds. The commenter does not specify which construction equipment should be electric. This is likely reflective of the fact that electrification of equipment remains limited to certain types of small equipment and that contractors may or may not be able to obtain electrified equipment for use during construction (based upon availability).

The commenter also suggests mandating the use of electric or hybrid tugs in-lieu of traditional diesel tugs. First, as noted above in response to comment E-4, the project would actually reduce operational emissions, including those resulting from tugs, by reducing the number of tug calls needed annually. Therefore, no operational air quality

 ⁶ See CARB's Frequently Asked Questions (FAQ) sheet here: <u>https://ww2.arb.ca.gov/sites/default/files/2020-06/200625factsheet_ADA.pdf</u> (CARB 2020a).
 ⁷ See CARB Resolution 20-19 (June 25, 2020), available at <u>https://ww2.arb.ca.gov/ma062520</u> (CARB 2020b).

impact was identified. Second, BAE Systems does not own its own tugs and hybrid or electric tugs are not available for use in the San Diego area. There are currently no electric tugboats in use in the San Diego Bay or anywhere in North America.⁸ The Ports of Los Angeles and Long Beach each tested out the world's first diesel electric hybrid tugboat, but that was over a decade ago and the tug is now based in the Pacific Northwest. A hybrid tug is in use in the Bay Area, but there are no hybrid-electric tugs operating in the San Diego region. Therefore, a requirement to use electric or hybrid tugs is currently infeasible due to significant questions of future availability that are out of the control of BAE Systems. It should nevertheless be noted that, in early 2020. Crowley Maritime Corporation, which operates two large tugboats that provide vessel berthing services in San Diego Bay, received grant funding to design, build, and *demonstrate* a new all-electric tugboat in San Diego Bay. The tug will be fully battery electric and therefore would result in zero tailpipe emissions. However, the timeline for the design, build, and demonstration is not currently known. Moreover, because the design of the tug is uncertain, there are outstanding questions about whether it could satisfy the unique needs of BAE Systems (related to capacity, availability when needed [scheduling], and the ability to operate safely considering vessel, personnel, and facility constraints).

Regarding the recommendation to provide subsidies for alternative transportation for workers, as a condition of approval, mitigation measure **MM-GHG-2** requires the project proponent to implement a Transportation Demand Management Plan that promotes alternative forms of transportation, including ridesharing, carpooling, and subsidized transit passes. Moreover, BAE Systems already encourages mass transit and carpooling in coordination with SANDAG's iCommute program and provides a free shuttle service to and from the Hilton San Diego Bayfront hotel parking garage downtown for all employees. These commitments would apply to both construction and operational employees.

Regarding the recommendation to require compliance with the Barrio Logan truck route, compliance is required by law and is enforced by the

⁸ See the San Pedro Bay Ports Technology Advancement Program 2019 Annual Report, available at <u>https://cleanairactionplan.org/documents/2019-tap-annual-report.pdf/</u> (Port of Long Beach and Port of Los Angeles 2020).

San Diego Police Department. Use of the designated truck route will also be a requirement of the Coastal Development Permit as well as the Mitigation Monitoring and Reporting Program (MMRP), which is incorporated into the Coastal Development Permit. The truck route has been in place since 2007, but revisions were approved by the San Diego City Council on December 4, 2018 (City Council Resolution R-2019-249) to direct truck traffic away from residential uses in the Barrio Logan community. Truck drivers associated with the proposed project would follow the existing regulations and truck route. Individual truck drivers who do not follow the City's regulations are subject to enforcement actions that can include fines. The District currently coordinates with the surrounding community in relation truck activity associated with the working waterfront and will continue to do so regardless of the proposed project.

Regarding the recommendation to require vessel speed reduction for all ships coming to or leaving the BAE Systems ship repair vard, the vessel speed reduction program does not apply to activity within the Bay. Speed within the Bay is regulated by the District's Port Code (Section No. 4.04), enforced by the Harbor Police and the Inland Navigation Rules of the U.S. Department of Homeland Security (Rule 6 -Safe Speed), and enforced by the U.S. Coast Guard. Safe Speed is generally acknowledged to be limited to 5 knots, well below the vessel speed reduction target, but it is ultimately defined by a number of factors that can influence a safe travelling speed for vessels on San Diego Bay that could indicate an even slower speed is prudent. The project would allow BAE Systems to handle bigger ships, such as the amphibious assault ships (LHD/LHA). According to the project proponent, these LHD/LHA ships would not immediately arrive from or depart to the sea; instead, it is anticipated that in all cases these LHD/LHA ships would transit to and from the BAE site from Naval Base San Diego, which is nearby and within San Diego Bay. Therefore, no changes to the Draft EIR are required in response to this comment.

Response to Comment E-6

The comment says that the largest emissions sources from the proposed project are the vessels and dredgers used during construction, and that **MM-GHG-3** is inconsistent with the CAP. The comment suggests that alternative fueled, electric, or hybrid technology should be required to ensure compliance with the CAP.

MM-GHG-3 requires the project proponent to use modern tugs, survey vessels, and dredgers available in the region. See response to comment E-5 above regarding electric or hybrid tugboats in place of tugboats with diesel engines. As discussed in response to comment E-5, hybrid or electric tugs are not currently available. The District continues to support tenant use of equipment and technologies "to achieve the lowest emissions possible," including with respect to tugs and other equipment that may be used by BAE Systems during shipyard operation. MM-GHG-3 helps implement CAP Measure TA2 because it requires contractors to use Tier 3 or better tugboats, vessels, and dredgers (which would include any available hybrid or electric tugs) if they are available, or to provide evidence that they are not available. Specifically, with respect to Tier 3 engines, CARB has not promulgated policies or regulations to require their use, and it is unclear if or when Tier 3 or better (cleaner) equipment will be available for use during the construction time period. It should also be noted that Tier 3 or better equipment was not assumed in the Draft EIR's emissions calculations due to questions of availability. The measure (CAP Measure TA2) itself acknowledges questions of availability, but nevertheless is included to encourage the use of emission-reducing technologies. Moreover, even if the project proceeds without the implementation of any Tier 3 (or better) equipment, GHG emissions would still be considered less than significant (refer to GHG Threshold 1).

The commenter is also referred to response to comment E-5 regarding the commenter's suggestions for the use of electrified construction equipment and zero-emission trucks.

E-6

cont

E-7

"consistent (After Mitigation). The largest emission source from the proposed project would be the vessels and dredgers used during construction. MM-GHG-3 requires the project proponent to use modern tugs, survey vessels, and dredgers available in the region." However, the Project does not include alternative fueled, electric and/or hybrid technology. As a result, the Project is not consistent with the CAP's TA2 and the DEIR's conclusion of consistency with the CAP based on MM-GHG-3 is not justified. Therefore, EHC recommends that the Project include the specific mitigation measures listed above (1.a through 1.c) in our air quality comments to ensure that the Project is consistent with the intent of the District's CAP support of non-Port-owned vehicles and vessels to achieve the lowest emissions possible, using a mix of alternative fueled, electric, or hybrid technology.

Hazards

 Hazardous materials are on the site and could be released under reasonably foreseeable conditions. The nearest potential sensitive receptors are approximately 785 feet away. This is the distance between the Project site boundary bordering Belt Street and the Barrio Logan community between Harbor and Main Streets. The Barrio Logan Community Plan allows child care centers, hospitals, and other sensitive land uses in all areas of the community. The DEIR analysis must assume that sensitive receptors may be located in the blocks between Harbor and Main, less than 1,000 feet from the BAE project.

Noise

E-8 1. As noted above, the nearest potential sensitive receptors are as close as 785 feet; this should be addressed in the DEIR.

E-9 Please contact either of us for additional information. Danny Serrano via email at dannys@environmentalhealth.org and/or David Flores via email at <u>davidf@environmentalhealth.org</u>.

Sincerely,

Danny Serrano, AICP Campaign Director



David Flores Air Quality Director

Response to Comment E-7

The comment indicates that hazardous materials are on site and could be released under reasonably foreseeable conditions. The comment suggests that the closest potential sensitive receptors are approximately 785 feet away, which is the distance between the project site boundary bordering Belt Street and the Barrio Logan community between Harbor and Main Streets. The comment states that the Barrio Logan Community Plan allows for childcare centers, hospitals, and other sensitive land uses in all areas of the community and suggests that the Draft EIR analysis must assume that sensitive receptors could be located in these areas, less than 1,000 feet from the proposed project.

The potential presence of hazards materials as well as potential impacts associated with them are disclosed in Section 4.4, Hazards and Hazardous Materials, of the Draft EIR. The comment suggests that the closest potential sensitive receptor could be 785 feet away based on the allowable zoning in the Barrio Logan Community Plan. However, CEQA requires an EIR to consider the effects of the project on the existing physical environment (see State CEQA Guidelines Section 15125(a)(3) and 15126.2), not on development that may be allowed to occur in the future under applicable land use and zoning laws. For CEQA purposes, existing conditions are generally the conditions that exist at the time the NOP is issued to the public (see State CEOA Guidelines Section 15125). To the District's knowledge, no childcare centers, hospitals, or other sensitive uses exist or are currently proposed in the area identified by the comment, and CEQA does not require an analysis of such an unknown use. Furthermore, the area east of the working waterfront is recommended to be developed with exclusively industrial uses and/or commercial/industrial uses in the Barrio Logan Community Plan, while residential uses are prohibited within District Tidelands. Therefore, to be consistent with the requirements of CEQA, the EIR evaluates conditions relative to existing baseline conditions. In addition, as it relates to the speculative nature of analyzing potential future land uses, please note State CEOA Guidelines Section 15384, Substantial Evidence, as it applies to speculation.

15384. Substantial Evidence

(a) "Substantial evidence" as used in these guidelines means enough relevant information and reasonable inferences from this information that

a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence.

(b) Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.

The EIR analysis is based on substantial evidence, and assuming that certain sensitive uses would be near the proposed project in the future would be speculative. Moreover, the impact analysis in the Draft EIR for hazards and hazardous materials does not rely on proximity to sensitive receptors for determining the significance of impacts, but rather on whether the proposed project would have the potential to result in the release of hazardous materials into the environment. As such, the hazards and hazardous materials impacts disclosed in the Draft EIR would remain unchanged, regardless of the distance of the closest sensitive receptor. As detailed in Section 4.4 of the Draft EIR, the proposed project would have the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. However, this impact would be reduced to a less-than-significant level with the implementation of mitigation measures that require safeguards to be taken during landside construction to ensure upset and accident conditions do not occur, and effects in the event of an unanticipated upset condition would be minimized. Therefore, the analysis of hazards and hazardous materials impacts in the Draft EIR is sufficient, and no additional analysis is required. No changes to the Draft EIR are required in response to this comment.

Response to Comment E-8

The comment suggests that the closest potential sensitive receptors are as close as 785 feet, and this should be addressed in the noise analysis of the Draft EIR.

Please see response to comment E-7. In addition, as discussed in Section 4.7, *Noise and Vibration*, of the Draft EIR, all of the land uses immediately adjacent to the project site are industrial or commercial and would not be considered noise-sensitive. The closest existing noise-sensitive receivers are more than 1,000 feet away. These include hotels and Coronado Tidelands Park to the west, on Coronado Island; Cesar Chavez Park to the northwest; Perkins Elementary School to the north; and homes to the north and northwest. Sensitive receivers to the east and south are even farther away because of the separation provided by commercial/industrial zones and San Diego Bay. Therefore, the analysis of noise and vibration impacts in the Draft EIR is sufficient, and no additional analysis is required. No changes to the Draft EIR are required in response to this comment.

Response to Comment E-9

This comment concludes the comment letter and provides a contact name and information.

The District appreciates EHC's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA.

5.3.6 Comment Letter F: Barrio Logan Planning Group

Comment Letter F

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3



August 20, 2020

Ms. Ann Moore Chair, Board of Port Commissioners Mr. Rafael Castellanos Board of Port Commissioner Mr. Larry Hofreiter, AICP Program Manager, Planning Port of San Diego Port Authority 3185 Pacific Highway San Diego, California 92101

Re: BAE Systems Waterfront Improvement Project and EIR

Dear Ms. Moore, Mr. Castellanos, and Mr. Hofreiter:

 At the regular meeting (via Zoom) of the Barrio Logan Community Planning Group, we heard and discussed the BAE Systems Waterfront Improvement Project as presented by Port Staff. We also heard a presentation by the Environmental Health Coalition regarding the same project and its impact on the air quality in Barrio Logan along with suggestions of how impacts from the project may be reduced. There was a detailed discussion of these matters engaging all points of view which resulted in the following motion of the planning group.

Be it resolved that:

F-2

F-3

 Air Quality is of foremost concern in Barrio Logan as this community has long been suffering as one of the most highly polluted in the San Diego region. The community is blessed with many families that have made Barrio Logan their home for many generations. It is these residents that bear the brunt of the negative effects of extreme air pollution, noise, and hazardous gases. The

community is engaged in a long-term struggle to correct this condition and is particularly concerned about the additional air pollution that will be the result of the projected five year construction period associated with the BAE Systems Waterfront Improvement Project.

Therefore, it is with the health and wellbeing of our residents that that we move the following:

2. The Port and the Environmental Health Coalition have been engaged in improving on the air quality in the community for some time and these cooperative efforts have resulted in improvements. There are more improvements that are associated with the BAE Systems Waterfront Improvement Project as well. While the Barrio Logan Planning Group greatly appreciates work of the Port in collaboration with the Environmental Health Coalition, there is still more that can be accomplished.

BARRIO LOGAN PLANNING GROUP | 1

Response to Comment F-1

The comment is an introductory comment stating that the Barrio Logan Community Planning Group discussed the proposed project with the District at its regular meeting and heard a presentation from EHC. The comment notes that the EHC presentation discussed the project's impacts on air quality in Barrio Logan along with suggestions of how impacts of the project may be reduced. The comment states that there was detailed discussion of these matters that resulted in the motion of the planning group as descried in the following comments.

The District appreciates the Barrio Logan Community Planning Group's interest in the proposed project. This comment is an introductory comment and does not raise any environmental issues requiring a response pursuant to CEQA. The specific comments raised following this introduction are listed separately, along with the District's individual responses.

Response to Comment F-2

The comment states that air quality is the foremost concern in Barrio Logan and that the community is one of the most highly polluted in the San Diego Region. The comment indicates that the community is particularly concerned about the additional air pollution that will be the result of the projected 5-year construction period associated with the proposed project.

The comment expresses concern regarding the additional air pollution that would be generated by construction of proposed project and its effects on air quality in the Barrio Logan community. Please see response to comment E-5 in Letter E. The comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment. However, the comment will be presented to the Board of Port Commissioners for its consideration.

Response to Comment F-3

The comment notes that the District and EHC have been engaged in improving air quality in the community and that these efforts have resulted in improvements. The comment also notes that there are more improvements associated with the proposed project as well. The comment states the Barrio Logan Community Planning Group's appreciation but suggests that there is more that can be accomplished. The comment expresses their support for the District's continued work with EHC on further emission reduction and supports their letter to the District dated August 17, 2020 that encourages a more aggressive program to replace diesel vehicles with zero-emission vehicles and enforcement of that program.

The District appreciates the commenter's support for the District's continued collaboration with EHC. The commenter expresses support for the recommendations provided in EHC's comment letter (Comment Letter E). Please see the responses to comments E-1 through E-9 for the District's responses to the EHC's recommendations. The comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment. However, the comment will be presented to the Board of Port Commissioners for its consideration.

F-3

cont

F-4



Therefore, the Barrio Logan Planning Group supports the Port's continuation of work with EHC on further emission reduction and supports their letter of August 17, 2020 to the San Diego Unified Port District which encourages a more aggressive program to replace diesel vehicles with Zero Emission Vehicles and enforcement of that program. As a result of this meeting and these presentations and after a long and detailed discussion, the Barrio Logan Planning Group believes that much more work remains to be done regarding air pollution resulting from waterfront industry. We thank the Port Board of Commissioners for the

work they have done to date on this matter and the resulting direction to staff regarding air quality concerns. We trust that you will continue with this effort. Therefore, the Barrio Logan Planning Group requests quarterly reports updating air quality and actions taken by the Port and its tenants to improve air quality in Barrio

Thank you for your consideration of this position of the Barrio Logan Planning Group.



Mark W. Steele, FAIA, AICP Chair, Barrio Logan Planning Group

Logan.

Response to Comment F-4

The comment states that the Barrio Logan Community Planning Group believes there is much more work to be done regarding air pollution from waterfront industry. The comment thanks the Board of Port Commissioners for its work completed to date on this matter and resulting direction to staff regarding air quality concerns. The comment requests quarterly reports updating air quality and actions taken by the District and its tenants to improve air quality in Barrio Logan.

The District appreciates the commenter's support for the District's continued work in reducing air pollution in the Barrio Logan community. Please see response to comment E-5 in Letter E. The comment does not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment. However, the comment will be presented to the Board of Port Commissioners for its consideration.

Response to Comment F-5

The comment concludes by thanking the District and providing a contact name.

The District appreciates Barrio Logan Community Planning Group's interest in the proposed project. This comment does not raise any environmental issues needing a response pursuant to CEQA.

BARRIO LOGAN PLANNING GROUP | 2

SDMAC

5.3.7 Comment Letter G: San Diego Military Advisory Council

Vice President Brandi Gill Secretary Dennis Dubard Treasurer Victor Ramsauer LevitZacks Board of Directors Richard Allen NFCU Jon Berg-Johnsen Lockheed Martin Dr. Stephanie Bulger D Community College Dis Paul Cassani Clifford Cho Bank of America Tom Garcia Marty Greene Booz Allen Hamilton Matthew Griesbach City National Bank Daniel Hazard Northrop Grumman Brian Hutcherson CBRE Terry Magee Consultant Michael McCloske Terry McKearney The Ranger Group Kimberley Miller Miller Public Affairs ROML Paul Pearigen, USN (Ret) Robert Pessoyer , BAE Systems Joseph Pierzina SDG&E John Quigley SAIC RADM James Quinn, USN (Ret) San Diego Padres Ray Roth PCR Systems George Scheel Valiant Integrated Tim Snoke General Atomics Earl Wederbrook Raytheon Mark Wernig Dowling & Yahnke Ward Wilson Weing Defense Space & Seco Mike Wolwode Wodeworks

Addistance Based Designer Juniter (Charr) Jam Bedringer Lang Blander, USMC (Rar) Peter Heider, USMC (Rar) RADE Lans Herring, USM (Mor) RADE Jack Hinner, USM (Mor) RADE Jack Hinner, USM (Mor) RADE Jack Hinner, USMC (Mor) VADIR The Laffeet, USM (Mor) RADE Herring Herring, USM (Mor) RADE Herring Herring, USM (Mor) RADE Herring Herring, USM (Mor) Comment Letter G

July 20, 2020

Mr. Peter Eicher Development Services Department San Diego Unified Port District 3165 Pacific Highway San Diego, CA 92101-1128

Re: BAE Systems Waterfront Improvement Project (SCH #2019039040; UPD # EIR-2018-197)

Dear Mr. Eicher,

The San Diego Military Advisory Council (SDMAC) is a not-for-profit 501(c)(6) organization established in 2004 to advocate on behalf of the military, their families, and veterans in the San Diego region. SDMAC's advocacy efforts include working with our community business leaders and elected officials to improve their understanding of the important contributions made by the military to our region and to our National Security. SDMAC annual Military Economic Impact Studies document the positive impact from Defense industry jobs upon our communities and it has never been more clear than during the current COVID-19 pandemic when so many businesses have closed or reduced their work force. The Defense industry is providing much of our region's economic resilience.

SDMAC most strongly supports BAE Systems' Waterfront Improvement Project. This project will bring improvements and efficiencies to critical modernization and maintenance work on U.S. Navy ships. San Diego is a vital component in the nation's defense strategy and shipbuilding and ship repair provides more than 12,000 good paying jobs to our region. The planned modernization project by BAE Systems will make work safer, cleaner, and more efficient, benefitting shippard employees, our region, and the U.S. Navy.

Please contact me if I may be of further assistance.

Sincerely

Mark Balmert Executive Director

409 Camino Del Rio South Suite 302 San Diego, CA 92108 www.SDMAC.org

Response to Comment G-1

The comment is an introductory comment that provides background on the San Diego Military Advisory Council and expresses support for the proposed project.

The District appreciates the San Diego Military Advisory Council's interest in the proposed project. The commenter expresses their support for the proposed project. The comments are general in nature and do not address a specific environmental issue in the Draft EIR. These comments do not raise specific issues related to the adequacy, accuracy, or completeness of the analysis of environmental impacts presented in the Draft EIR. Therefore, no changes to the Draft EIR are required in response to this comment. However, the comment will be presented to the Board of Port Commissioners for its consideration.

Anchor QEA, LLC (Anchor QEA). 2019. Year 2 Post-Remedial Monitoring Progress Report. February 5, 2019. Available:

https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000003580. Accessed: September 2019.

- BAE Systems. 2018. Sustainability Booklet, Exhibit 4.
- California Air Resources Board. 2020a. Advanced Clean Trucks: Accellerating Zero-Emission Truck Mrkets. Last updated June 25, 2020. Available: https://ww2.arb.ca.gov/sites/default/files/2020-06/200625factsheet_ADA.pdf.
 - . 2020b. June 25-26, 2020, Board Meeting Agenda Remote Meeting. CARB Resolution 20-19 (June 25, 2020). Available: <u>https://ww2.arb.ca.gov/ma062520</u>.
- California Legislative Information. 2020. *Bill Text, Assembly Bill No. 939.* Available: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=198919900AB939. Accessed: October 19, 2020.
- CalRecycle. 2018. Fire-Year Review Report for the Countywide Integrated Waste Management Plan for the County of San Diego. Available: https://www.sandiegocounty.gov/content/dam/sdc/dpw/SOLID_WASTE_PLANNING_and_REC YCLING/Files/2.%20Five-YearReview-%20Final.pdf. Accessed: October 19, 2020.
 - ——. 2020. *Frequently Asked Questions.* Available: https://www.calrecycle.ca.gov/recycle/commercial/faq. Accessed: October 19, 2020.
- Environmental Protection Agency (EPA). 2020. *Ocean Disposal of Dredged Material*. Available: https://www.epa.gov/ocean-dumping/ocean-disposal-dredged-material. Accessed November 9, 2020.
- National Oceanic and Atmospheric Administration (NOAA). 2017. *Guidance for Developing a Marine Mammal Monitoring Plan.*
 - ——. 2014. California Eelgrass Mitigation Policy and Implementing Guidelines. October. Available: https://media.fisheries.noaa.gov/2020-08/cemp_oct_2014_final.pdf.
- San Diego County. 2005. Integrated Waste Management Plan, Consisting of: Countywide Summary Plan & Countywide Siting Element, 2005 5-Year Revision Final. Available: https://www.sandiegocounty.gov/content/dam/sdc/common_components/images/dpw/recyc lingpdfs/summaryplan.pdf. Accessed: October 19, 2020.
 - ——. 2007. County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Air Quality. March 19. Prepared by the Land Use and Environment Group, Department of Planning and Land Use Department of Public Works, Available: https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf.

- San Diego Unified Port District (District). 2019. Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District.
- Port of Long Beach and Port of Los Angeles. 2020. San Pedro Bay Ports Clean Air Action Plan. 2019 Annual Report and 2020 Priorities: Technology Advancement Program. March. Available: https://cleanairactionplan.org/documents/2019-tap-annual-report.pdf/.

Exhibit 1 BAE Systems San Diego Ship Repair Pier 1 North Drydock and San Diego Shipyard Sediment Remediation North Shipyard Site 36-Month Post-Transplant Eelgrass Monitoring Report

BAE Systems San Diego Ship Repair Pier 1 North Drydock and San Diego Shipyard Sediment Remediation - North Shipyard Site 36-Month Post-Transplant Eelgrass Monitoring Report San Diego Bay, CA

Prepared for:

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North

June 2020

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Keith W. Merkel, Principal Consultant

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INTRODUCTION

M&A was contracted by the San Diego Bay Environmental Restoration Fund – North (North Trust) and BAE Systems San Diego Ship Repair, Inc. (BAE Systems) to prepare and implement a mitigation plan for impacts to eelgrass associated with the San Diego Shipyard Sediment Remediation Project - North Shipyard Site Project (Sediment Remediation Project) and impacts to eelgrass as well as impacts of bay coverage associated with the BAE Systems Pier 1 North Drydock Project (Drydock Project), respectively. The Sediment Remediation Project was authorized in 2014 with eelgrass mitigation requirements falling under the Southern California Eelgrass Mitigation Policy (SCEMP) (NMFS 1991 as amended, Rev. 11). The subsequent Drydock Project was authorized in 2016 under the California Eelgrass Mitigation Policy (CEMP) (NMFS 2014).

Because the CEMP is strongly based on the SCEMP, the requirements are very similar. The primary difference applicable to the present projects is the CEMP requirement for an initial restoration planting effort of 1.38:1 (initial restoration area to impact area) rather than at the required ultimate success ratio of 1.2:1 that is common to both the CEMP and SCEMP. Under the SCEMP, no minimum restoration target was set, although successful restoration has been achieved by restoration efforts that buffer against shortfalls by oversizing the initial restoration effort to account for less than full bed coverage within the mitigation area. For mitigation of bay coverage, there is no initial restoration ratio that applies to the mitigation site and the final mitigation ratio is set at a 1:1 (eelgrass area to bay coverage area).

The San Diego Shipyard Sediment Remediation Project - North Shipyard Site Project involved the remediation of marine sediments containing pollutants within the BAE Systems San Diego Ship Repair yard. The work was conducted in response to Waste Discharge Requirement Order (WDR) No. R9-2013-0093 issued by the Regional Water Quality Control Board (RWQCB) in July 2013. The work was expected to result in impacts to 1.08 acres of eelgrass as a result of contaminated sediment removal (Merkel & Associates 2013). However, the final impacts from this work were determined to be 1.02 acres (Merkel & Associates 2016). Thus, the SCEMP required initial restoration effort to be a minimum of 1.22 acres, and the final SCEMP required mitigation needs for this work to be 1.22 acres (Table 1).

The BAE Systems Pier 1 North Drydock Project involved the construction of facilities for a new floating drydock to support the current and planned future home-porting of United States Navy ships in San Diego and allow greater flexibility in the utilization of drydocking facilities. The project resulted in an impact of 3.87 acres of bay coverage, to be offset by a 1:1 enhancement of other waters by restoration of eelgrass.

During the joint eelgrass mitigation site construction, an additional 0.40 acre of eelgrass was impacted within the mitigation site work area. The CEMP calls for an initial restoration planting effort at a ratio of 1.38:1, which results in the need for a minimum of 0.55 acres to be planted. The ultimate CEMP required mitigation for this construction impact is a 1.2:1 replacement ratio, which results in the need for 0.48 acre of eelgrass to be developed.

Thus, the total mitigation need for the San Diego Shipyard Sediment Remediation Project - North Shipyard Site Project and the Pier 1 North Drydock project combined is 5.57 acres (1.22 acres plus 3.87 acres plus 0.48 acre) (Table 1).

Element and Impact Type	Impact (acres)	Initial Restoration Ratio (Planting:Impact)	Minimum Planting Area (acres)	Required Success Ratio (Mit:Impact)	Mitigation Area Required (acres)
Shipyard Sediment Remediation	1.02		1.22		1.22
Eelgrass impact	1.02	1.2:1	1.22	1.2:1	1.22
Pier 1 North Drydock	3.87		3.87		3.87
Eelgrass impact	0.00	1.38:1	0.00	1.2:1	0.00
Bay Coverage	3.87	1:1	3.87	1:1	3.87
Eelgrass Mitigation Site Impacts	0.40		0.55		0.48
Eelgrass impact const. damage	0.40	1.38:1	0.55	1.2:1	0.48
EFFECTIVE REQUIREMENT	5.29		5.64		5.57
RISK MITIGATED SITE SIZING*	5.29		6.77		5.57

Table 1. Eelgrass and Bay Coverage CEMP Required Mitigation Needs Summary

*Risk mitigated mitigation site sizing is based on an assessment of potential for partial site failure or transitory gaps that depress the overall areal coverage of eelgrass within the mitigation area. This is a non-regulatory scaling of the mitigation based on best professional judgment, site location, and design conditions.

To address the mitigation requirement for both projects in an efficient manner, an eelgrass mitigation and monitoring plan was developed to complete both project mitigation obligations at the same location (M&A 2016). The mitigation need to be satisfied at the South Bay eelgrass mitigation site is successful restoration of 5.57 acres of eelgrass (Table 1). Because eelgrass dynamics can result in fluctuations in eelgrass areal extent through time, expanded eelgrass restoration is a good way to buffer against potential shortfalls due to transitory gaps in mitigation eelgrass coverage. However, for the present restoration, much of the mitigation demand is driven by impacts that do not have a required initial buffer (i.e., 1.38:1 to achieve the mitigation objectives). As a result, the mitigation plan for the work took into consideration the risks of shortfall and scaled the initial site design and eelgrass transplantation up from the final mitigation need to provide a buffer. The final mitigation site was constructed to be 6.77 acres (approximately 122 percent of the ultimate mitigation need). This extent of buffer between site size and mitigation need is expected to be adequate to protect against bed fluctuations in the mitigation site.

Upon approval of the mitigation plan, construction of the mitigation site, and receipt of a Letter of Authorization (LOA) from the California Department of Fish and Wildlife (CDFW 2017), the eelgrass transplant was completed in accordance with the transplant plan. Transplantation was conducted during May and June 2017. The 6.77 acres of eelgrass mitigation site was planted with eelgrass planting units at 1-meter on center spacing. Unvegetated slopes and the fill settlement trough between the mitigation site and the adjacent eelgrass was planted at a lower density to repair site damage and to stabilize slopes of the mitigation site. This increased the total planted area to 7.7-acres. The restoration site is located within the western end of the abandoned intake channel of the former South Bay Power Plant in South San Diego Bay (Figure 1). The oversizing of the transplant site provides capacity for some eelgrass losses to occur while still achieving the ultimate mitigation objectives.



_ Merkel & Associates, Inc. .

RESTORATION METHODS

SITE PREPARATION

The eelgrass transplant site was constructed by raising the bottom elevations from an average of approximately -8.5 feet MLLW to a consolidated elevation of -4 feet MLLW. This was accomplished by filling the channel with clean sediment dredged from the outermost portion of the Pier 1 North drydock sump. The sediment was placed within the transplant site to raise the bay floor to elevations equal to the elevation of the adjacent bottom that supports eelgrass to the south and north of the site.

DONOR BEDS

Donor eelgrass for the transplant was derived from natural eelgrass beds located adjacent to the Chula Vista Bayside Park (Figure 1). These donor beds were primarily selected based on a number of factors: 1) Proximity to the transplant receiver site that favors both logistic convenience and selection of appropriate plant materials for the area; 2) Suitability of donor site size and eelgrass density to provide necessary transplant materials; 3) Recovery potential for the donor site; and, 4) Accessibility of the donor site and diver safety.

EELGRASS RESTORATION

The eelgrass restoration took place between May 3, 2017 and June 19, 2017. A 6.77-acre eelgrass mitigation site was planted at 1-meter on center spacing. Surrounding site slopes and the gap between the site and adjacent eelgrass was planted at a lower density to fill the gap between the native eelgrass beds and the restoration site in order to stabilize the mitigation site slope and repair construction period damage. A total of 28,855 eelgrass planting units were planted within the site. This eelgrass transplant was performed using transplant methods discussed in the final eelgrass mitigation and monitoring plan for the project.

The transplant made use of biodegradable soft anchors to fasten bare-root units to the bottom. Eelgrass was salvaged from natural donor beds located adjacent to the Chula Vista Bayside Park. Eelgrass was harvested by hand and processed into planting units of 8 turions (leaf-shoots) per unit. These planting units were processed the same day that harvesting was completed and were planted within 24 hours. Harvesting and planting were accomplished by SCUBA divers, planting each unit on 1-meter centers for the core eelgrass transplant area and more sparsely to the extent of the constructed mitigation site.

REFERENCE SITE

A 14.5-acre eelgrass reference site was established in an adjacent area to the north of the restoration site (Figure 1). The site was selected based on proximity to and similarity in physical and biological characteristics to the proposed restoration site. Monitoring of the reference site will be conducted coincident with the monitoring of the restoration site. Changes in the reference site over time will be considered to represent natural environmental variability when evaluating the performance of the restoration site (see Monitoring Program sections).

EELGRASS MONITORING PROGRAM

As outlined in the Eelgrass Mitigation Plan, upon completion of the planting effort, a monitoring program was initiated and has continued for a 60-month (5-year) period as outlined in the CEMP. Areal extent and density of the transplanted eelgrass and natural reference sites will be monitored using interferometric sidescan sonar acoustic survey techniques that have been applied to eelgrass mapping within the harbor and impact assessment. The spatial distribution of eelgrass derived from acoustic survey will be supplemented with bed condition data collection including turion density, leaf length, epiphytic loading, and disease observations.

The monitoring program is being conducted at intervals of 0, 6, 12, 24, 36, 48, and 60 months posttransplant. For each monitoring interval, a summary report is prepared and submitted to BAE Systems and the North Trust for review and submittal to the resource and regulatory agencies.

Monitoring reports include information from previous monitoring intervals, including numerical comparisons and graphical presentations of changing bed configurations. The monitoring reports include an analysis of any declines or expansions in eelgrass coverage based on physical conditions of the site, as well as any other significant observations. Finally, the monitoring reports provide a prognosis for the future of the eelgrass bed and identify the timing for the next monitoring period.

Monitoring of the restoration area commenced with the post-transplant (0-month) monitoring. The 6-month monitoring interval was shifted from December to October 2017 to coincide with the end of the growing season to ensure that valuable information on growth and survival is collected. The overall anticipated monitoring schedule is outlined in Table 2. Due to a heavy and persistent red tide in the early spring, the current 36-month survey was conducted early in order to assess the site conditions prior to any possible impacts associated with shading or other water quality impacts from this phenomenon.

ACTIVITIES	TIME PERIOD	REPORTING PERIOD
1. Complete Eelgrass Transplant	June 2017	
2. Complete 0-Month Survey	June 2017	July 2017
3. Complete 6-Month Survey	October 2017	November 2017
4. Complete 12-Month Survey	June 2018	July 2018
5. Complete 24-Month Survey	June 2019	July 2019
6. Complete 36-Month Survey	May 2020	June 2020
7. Complete 48-Month Survey	June 2021	July 2021
8. Complete 60-Month Survey	June 2022	July 2022

Table 2. Mitigation Monitoring Schedule.

The mitigation requirements for the project work require the successful establishment of 1.2:1 replacement to impact areas for eelgrass lost due to the project implementation, and 1:1 for bay coverage impacts not resulting in eelgrass loss. This requires 5.57 acre of eelgrass to be successfully restored to compensate for the loss of approximately 5.29 acre of eelgrass impacted by the projects. It is anticipated that this goal will be met.

MITIGATION SUCCESS CRITERIA

Mitigation will be deemed successful when it has met the success criteria outlined in the CEMP. Criteria for determination of transplant success will be based upon a comparison of areal extent of eelgrass and density (leaf shoots per square meter) between the reference sites and the restoration sites. Key success criteria are as follows:

- Month 0 Monitoring should confirm the full coverage distribution of planting units over the initial mitigation site as appropriate to the geographic region.
- Month 6 Persistence and growth of eelgrass within the initial mitigation area should be confirmed, and there should be a survival of at least 50 percent of the initial planting units with well-distributed coverage over the initial mitigation site. For seed buoys, there should be demonstrated recruitment of seedlings at a density of not less than one seedling per four (4) square meters with a distribution over the extent of the initial planting area. The timing of this monitoring event should be flexible to ensure work is completed during the active growth period.
- Month 12 The mitigation site should achieve a minimum of 40 percent coverage of eelgrass and 20 percent density of reference site(s) over not less than 1.2 times the area of the impact site.
- Month 24 The mitigation site should achieve a minimum of 85 percent coverage of eelgrass and 70 percent density of reference site(s) over not less than 1.2 times the area of the impact site.
- Month 36 The mitigation site should achieve a minimum of 100 percent coverage of eelgrass and 85 percent density of reference site(s) over not less than 1.2 times the area of the impact site.
- Month 48 The mitigation site should achieve a minimum of 100 percent coverage of eelgrass and 85 percent density of reference site(s) over not less than 1.2 times the area of the impact site.
- Month 60 The mitigation site should achieve a minimum of 100 percent coverage of eelgrass and 85 percent density of reference site(s) over not less than 1.2 times the area of the impact site.

Areas that do not meet the above success criteria may require subsequent restoration with an associated extended five-year monitoring period, until the final goal is achieved.

36-MONTH POST-TRANSPLANT SURVEY METHODOLOGY

M&A conducted the 36-month post transplant survey on May 4, 2020. The survey consisted of eelgrass areal coverage investigations within the eelgrass restoration and reference sites, as well as the donor sites. Data were collected using interferometric sidescan sonar, which provided an acoustic backscatter image of the seafloor within the project area. Interpretation of the backscatter data allowed for an assessment of the distribution of eelgrass. Sidescan backscatter data were acquired at a frequency of 468 kHz scanning out 31 meters on both the starboard and port channels for a 62-m wide swath. The rigid hull mounted interferometric sidescan system integrates motion sensors to control for heave pitch, and roll as well as a dual antenna positioning system and electronic compass to control for vessel position and yaw. This rigid integration of the interferometric sidescan transducers within the positioning sensors provides significantly increased precision and accuracy over conventional towfish sidescan sonar equipment.

The survey was conducted by navigating parallel tracklines, spaced to allow for overlap between adjoining sidescan swaths. Survey swaths were navigated until the entirety of the survey area was captured in the survey report. All data were collected in latitude and longitude using the North American Datum of 1983 (NAD 83), converted to the Universal Transverse Mercator system in meters (UTM), and plotted on a geo-rectified aerial image of the project site. Following completion of the survey, sidescan sonar traces were joined together and geographically registered. Eelgrass was digitized as a theme over an aerial image of the project site to calculate spatial metrics defining the extent and distribution of eelgrass. Metrics determined for eelgrass from the acoustic survey include: spatial distribution, areal extent, and percent vegetated cover within the areal extent of the beds.

Following the sidescan survey, the restoration site and reference site were examined by SCUBA to assess the eelgrass quality, verify the sidescan data, and measure the density of actively growing leaf shoots by conducting shoot counts within a 1/16-m² quadrat. Twenty replicate quadrats were randomly placed within the eelgrass bed of the APE and reference areas to obtain a mean shoot density for the eelgrass beds.

The reported metrics for eelgrass are as follows:

• Spatial Distribution

The spatial distribution of eelgrass habitat was delineated by a contiguous boundary around all areas of vegetated eelgrass cover extending outward a distance of 5 meters. The resultant spatial distribution boundary of the eelgrass habitat was then clipped to remove areas that were determined to be unsuited to supporting eelgrass based on depth, substrate, or existing structures.

• Areal Extent

The areal extent is the quantification of the spatial distribution of eelgrass habitat including the vegetated cover and extent of unvegetated habitat that defines a coalesced bed with gaps of less than 1 meter across being considered part of the defined bed.

• Percent Vegetated Cover

Eelgrass vegetated cover exists when one or more leaf shoots (turions) per square meter is present. The percent bottom cover within eelgrass habitat is determined by totaling the area of vegetated eelgrass cover and dividing this by the total eelgrass habitat area.

• Turion (Shoot) Density

Turion density is the mean number of eelgrass leaf shoots per square meter within mapped eelgrass vegetated cover. Turion density should be reported as a mean \pm the standard deviation of replicate measurements. The number of replicate measurements (n) is reported along with the mean and deviation. Turion densities are determined only within vegetated areas of eelgrass habitat; and therefore, it is not possible to measure a turion density equal to zero.

The mapping method applied during this investigation provides for a substantial degree of accuracy and repeatability over time.

In order to ensure consistency in analyses and reporting through time, the quantification of all metrics, inclusive of spatial distribution and areal extent of beds that map extend beyond the bounds of the reference and transplant areas, is limited to areas within the initially established monitored sites. This precludes potential for either the reference or transplant areas to extend beyond the initially established boundaries.

36-MONTH POST-TRANSPLANT MONITORING RESULTS

Bed spatial and density metrics for the eelgrass restoration and reference sites are summarized in Table 3. The total areal extent of eelgrass within the mitigation site amounted to approximately $26,845 \text{ m}^2$ (6.6 acres) and approximately $58,749 \text{ m}^2$ (14.5 acres) within the reference site (Figure 2, Table 3). Eelgrass in both the restoration and reference sites was healthy in appearance, with epiphytic loading of approximately 10-15 percent in the restoration site and 15-20 percent in the reference site. There was no sign of disease and no sediment accumulation in either of the sites. Eelgrass canopy height ranged from 0.3 to 0.9 meters within the restoration site and from 0.2 to 0.8 meters within the reference site.

Location	Eelgrass Areal Extent (m ²)	Vegetated Cover (m ²)	Percent Vegetated Cover	Density (turions/m ²) (# of replicates)	
Eelgrass Restoration Site	$26,845 \text{ m}^2$	$25,584 \text{ m}^2$	95.3 %	146.3±58.5 (n=20)	
	(6.6 ac)	(6.3 ac)			
Reference Site	58,749 m ²	58,749 m ²	100 %	114.3±47.3 (n=20)	
Nelelence Site	(14.5 ac)	(14.5 ac)	100 %		

Table 3. 36-month Eelgrass Bed Metrics as Defined under the CEMP.



DISCUSSION

As with the 6-month, 12-month, and 24-month surveys (Figures 3-5), the 36-month survey revealed that the planting units were healthy and fully coalesced into a closed canopy bed over the majority of the restoration site (Figure 2). Only the easterly end of the site that starts to slope towards the deeper channel and the trough between the restoration site fill and the adjacent natural beds to the north showed notable gaps in eelgrass coverage. The trough between the mitigation area and the eelgrass beds to the south along the CVWR has fully filled in with eelgrass. The Reference Site continues to support complete eelgrass coverage; and thus, the reference adjusted requirement is equivalent to the unadjusted requirement (Figure 6).

The CEMP outlines milestones for the 36-month monitoring interval of 100 percent areal coverage that should be achieved at the 36-month milestone. At the present time, the mapped beds support approximately 113 percent of the mitigation need, thus exceeding this progress milestone (Figure 6). The CEMP further establishes a standard of achieving 85 percent of the turion density within 36 months of the transplant. At the present time, the transplant site mean density (146.3±58.5 turions/m²) is 128 percent of that in the reference site (114.3±47.3 turions/m²), thus exceeding this progress milestone (Figure 7).

This document constitutes the 36-month post-transplant completion report. A 48-month post-transplant monitoring will be scheduled for June 2021. A report will be prepared providing the findings of this survey and noting any changes to initial planting conditions.











M&A# 14-010-04



Merkel & Associates, Inc.

REFERENCES

- Merkel & Associates. 2016. Eelgrass Transplant and Monitoring Plan in Support of the BAE Systems San Diego Ship Repair Pier 1 North Project and San Diego Shipyard Sediment Remediation Project, North Shipyard Site Projects, San Diego Bay. July 2016.
- Merkel & Associates. 2017a. Post-Construction Eelgrass Survey for the BAE Systems San Diego Shipyard Repair Pier 1 North Drydock Project and San Diego Shipyard Sediment Remediation Project, North Shipyard Site Projects, San Diego Bay, California. Prepared for BAE Systems and San Diego Bay Environmental Restoration Fund - North. May 2017.
- Merkel & Associates. 2017b. Post-Transplant (0-Month) Eelgrass Survey for the South San Diego Bay Eelgrass Restoration in Support of the BAE Systems San Diego Shipyard Repair Pier 1 North Drydock Project and San Diego Shipyard Sediment Remediation Project, North Shipyard Site Projects, San Diego Bay, California. Prepared for BAE Systems and San Diego Bay Environmental Restoration Fund - North. July 2017.
- Merkel & Associates. 2017c. 6-Month Post-Transplant Eelgrass Survey for the BAE Systems San Diego Shipyard Repair Pier 1 North Drydock Project and San Diego Shipyard Sediment Remediation Project, North Shipyard Site Projects, San Diego Bay, California. Prepared for BAE Systems and San Diego Bay Environmental Restoration Fund - North. November 2017.
- Merkel & Associates. 2018. 12-Month Post-Transplant Eelgrass Survey for the BAE Systems San Diego Shipyard Repair Pier 1 North Drydock Project and San Diego Shipyard Sediment Remediation Project, North Shipyard Site Projects, San Diego Bay, California. Prepared for BAE Systems and San Diego Bay Environmental Restoration Fund - North. July 2018.
- Merkel & Associates. 2019. 24-Month Post-Transplant Eelgrass Survey for the BAE Systems San Diego Shipyard Repair Pier 1 North Drydock Project and San Diego Shipyard Sediment Remediation Project, North Shipyard Site Projects, San Diego Bay, California. Prepared for BAE Systems and San Diego Bay Environmental Restoration Fund - North. July 2019.
- National Marine Fisheries Service. 1991. Southern California Eelgrass Mitigation Policy. (1991, Revision 11). R.S. Hoffman, ed.
- NOAA Fisheries, West Coast Region. 2014. California Eelgrass Mitigation Policy and Implementing Guidelines. October 2014.

APPENDIX A. CEMP Eelgrass Mitigation Reporting Form

CALIFORNIA EELGRASS MITIGATION POLICY MONITORING AND COMPLIANCE REPORTING SUMMARY

ACTION NAME

BAE Systems San Diego Ship Repair Pier 1 North Drydock and San Diego Shipyard Sediment Remediation-North Shipyard										
ACTION PARTY INFORMATION										
ΝΑΜ	BAE Systems	BAE Systems San Diego Ship Repair				Address 2205		2205 Eas	205 East Belt Street	
CONTACT NAME	Sandor Halva	Sandor Halvax				CITY, STATE, ZIP San Dieg		San Dieg	o, CA 92113	
Рном	619-557-4210	619-557-4210					FAX	619-557	-4210	
EMAII	sandor.halva	sandor.halvax@baesystems.com								
ΝΑΜ	SD Bay Enviro	onmental Res	toration Fund -	North		AD	DRESS	1322 Sco	ott Street, Suite 104	
CONTACT NAME	Mike Palmer				CITY,	CITY, STATE, ZIP San Dieg		o, CA 92106		
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Еман	EMAIL mpalmer@demaximis.com									
MITIGATION CONSULTANT										
ΝΑΜ	Merkel & Ass	ociates, Inc.				AD	DRESS	5434 Ru	ffin Road	
CONTACT NAME	Keith Merkel				CITY, STATE, ZIP San Dieg		o, CA 92123			
Рном	858-560-5465	5				Fax 858-560-7779		-7779		
Еман	kmerkel@me	rkelinc.com								
PERMIT DATA	۹									
PERMIT		ISSUANC	E DATE	EXPIRATI	ON DAT	E	AGENC	Y CONTA	ЛСТ	
SPL-2015-0031	2-RRS	05/18/16	•	05/17/19		Robert Smith				
R9-2015-0080		01/22/16		01/21/21	01/21/21 Lisa		Lisa Hor	Honma		
SPL-2013-0014	6-RRS	11/02/13		11/11/18			Robert	Smith		
EELGRASS IM	PACT AND MIT	IGATION N	EEDS SUMMA	RY						
PERMITTED EELG	RASS IMPACT ESTIN	IATE (M ²)								
ACTUAL EELGRAS	TUAL EELGRASS IMPACT (M ²), 21,408 ON 2014 - 2016									
EELGRASS MITIG	ASS MITIGATION NEEDS (M ²) 22,541 MITIGATION PLAN REFERENCE M&/				M&A 2	2016				
IMPACT SITE LOC	PACT SITE LOCATION BAE Systems San Diego Shipyard, San Diego Bay									
IMPACT SITE CEN	MPACT SITE CENTER COORDINATES 486,355mE, 3,617199mN									
MITIGATION SITE	MITIGATION SITE LOCATION South San Diego Bay, California									
MITIGATION SITE	CENTER COORDINA	TES	489,551mE; 3	,618,987m	N					
ACTION ACTI										
ACTIVITY			START DATE	END D	DATE	REFERENCE INFO.				
EELGRASS IMPAC	EELGRASS IMPACT		2014	20	016	M&	1&A 2016			
INSTALLATION OF	STALLATION OF EELGRASS MITIGATION 05/03/17 06/19/17 N		M&	M&A July 2017						
INITIATION OF M	TIGATION MONITO	RING	06/19/17	06/3	30/22	M&	A July 2	017		
MITIGATION	STATUS DATA									
MITIGATION	SCHEDULED	SURVEY	EELGRASS	BO	гтом		EELGR	ASS	REFERENCE	
MILESTONE	SURVEY	DATE		COV		DENSITY INFORM		INFORMATION		
0.446.1771	lun - 2017	00/40/47		(PER		r) (TURIONS/M ²)			M8 A 164-2047	
U-MONTH	June 2017	06/19/17	27,382	100	0.0 %		8	22.4	IVI&A JUIY 2017	
b-MONTH	Uctober 2017	10/13/1/	23,699	95	0.2 %		106.3±23.1		IVI&A NOVEMber2017	
12-MONTH	June 2018	06/12/18	26,075	98	5.8 %		86.9±28.6		IVI&A JUIY 2018	
24-MONTH	June 2019	06/24/19	26,503	95	5.5%		136.0±17.5		IVI&A July 2019	
36-MONTH	June 2020	05/04/20	26,845	95	5.3%		146.3±58.5 M&		M&A June 2020	
48-MONTH	48-MONTH June 2021									
bU-MONTH June 2022										
WAS MITIGATION	WAS MITIGATION MET?				Pending					
WERE MITIGATIO		G PERFORMED T	IMELY?						Pending	

WERE MITIGATION DELAY INCREASES NEEDED OR WERE SUPPLEMENTAL MITIGATION PROGRAMS NECESSARY?

Pending

Exhibit 2

Eelgrass Transplant and Monitoring Plan in Support of the BAE Systems San Diego Ship Repair Pier 1 North Drydock Project and San Diego Shipyard Sediment Remediation Project North Shipyard Site

EELGRASS TRANSPLANT AND MONITORING PLAN IN SUPPORT OF THE BAE SYSTEMS SAN DIEGO SHIP REPAIR PIER 1 NORTH DRYDOCK PROJECT AND SAN DIEGO SHIPYARD SEDIMENT REMEDIATION PROJECT NORTH SHIPYARD SITE SAN DIEGO BAY, CALIFORNIA

Prepared for:

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November 2015

Keith Merkel, Principal Consultant

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APPENDIX A. CONSTRUCTION PLANS PIER 1 NORTH DRY DOCK PROJECT SOUTH BAY EELGRASS RESTORATION SITE

Eelgrass Transplant and Monitoring Plan in Support of the BAE Systems San Diego Ship Repair Pier 1 North Drydock Project and San Diego Shipyard Sediment Remediation Project – North Shipyard Site San Diego, California

Merkel & Associates, Inc. November 2015

INTRODUCTION

Eelgrass habitat restoration is required to offset impacts of two separate projects occurring within the BAE Systems San Diego Ship Repair Inc. (BAE Systems) leasehold. The first is a drydock project known as the Pier 1 North Drydock Project that is a BAE Systems sponsored capital project. The second is a nearing completion sediment remediation project identified as the San Diego Shipyard Sediment Remediation Project – North Shipyard Site that is a project of the San Diego Bay Environmental Restoration Fund – North, a trust for the implementation of the remediation project.

BAE Systems is proposing to construct facilities for a new floating drydock being constructed to support the current and planned future home-porting of United States (US) Naval assets (ships) in San Diego and allow greater flexibility in the utilization of drydocking facilities. The project is known as the Pier 1 North Drydock Project. The future needs for drydocking of US Naval vessels stationed in San Diego Bay exceeds current drydock capacity. The purpose of the proposed project is to (1) increase BAE Systems' drydock capacity to facilitate required maintenance of existing and future US Naval assets and (2) provide additional capacity for commercial vessel drydock needs that cannot currently be met by existing drydock capacity. The project would result in significant impacts to eelgrass as well as impacts associated with surface coverage of the Bay. Merkel & Associates Inc. (M&A) has been retained by BAE Systems to prepare an eelgrass and bay coverage mitigation plan in support of the Pier 1 North Drydock Project.

Based on 2013 and 2014 eelgrass surveys and environmental impact assessment completed under the California Environmental Quality Act, the proposed BAE Systems drydock would be expected to impact 0.13 acre of eelgrass associated with dredging of a sump within which submergence of the drydock may be conducted. Under the adopted California Eelgrass Mitigation Policy (CEMP) (NOAA Fisheries, West Coast Region 2014), the actual impact of the project will be determined by comparisons between preconstruction and post-construction survey results with consideration of reference site performance. Identified impact will require mitigation by successfully creating replacement eelgrass at a ratio of 1.2:1 (mitigation to impact). However, under the CEMP, the success history for eelgrass restoration in southern California dictates a 1.38:1 minimum restoration effort with a success requirement remaining at the established 1.2:1 ratio.

In addition to the impact to eelgrass, the project results in 4.91 acres of bay coverage associated with the permanently moored drydock, overwater wharves, ramps, and breasting dolphins. This coverage area includes both immediately constructed elements and elements of the northern wharf and ramp, as well as the intermediary wharf between the north and south ramps that must be deferred pending removal of the existing decommissioned SDG&E cooling tunnels that conflict with construction of these facilities. Bay coverage is anticipated to result in significant impacts to habitat function as a result of reduced primary productivity and reduction in avian foraging opportunity. However, this impact is somewhat offset by increased secondary productivity of the structures themselves.

Mitigation for bay coverage is different from that of bay fill impacts in that one results in reduction in marine habitat function, while the other results in complete loss of the habitat. The reduction of productivity and function, without complete loss of value, has been mitigated using one of three different measures: 1) expand the bay, 2) remove other bay coverage, or 3) enhance productivity of other areas of the Bay to offset the functional reductions occurring as a result of impacts at the site. These measures are implemented on a 1:1 ratio basis.

There are no large bay area expansion opportunities currently available; as such, this option was not considered viable. Because the project follows closely behind the Pier 4 replacement project, the opportunities for bay coverage removal as mitigation have been substantially depleted on site, and some credits were even drawn from the Port's coverage ledger to cover the mitigation needs of the Pier 4 replacement. However, 1.04 acres of the Pier 1 North Drydock project's bay coverage is being offset by the removal of the BAE Systems Pier 2 and the removal of the existing smaller drydock (AFDL/Diligence) from the Bay. Beyond these bay coverage offsets, it is not practical to achieve further bay coverage reductions for a project of the scale of the drydock. As such, a residual coverage impact of 3.87 acres remains, and enhancement of function is the preferred mitigation method for this residual.

Of the measures available for bay impact, development of eelgrass within unvegetated bay areas is the most ecologically preferred of the available options as it provides the greatest functional lift in terms of the resources affected (productivity, fish, birds, etc.). Other options include removal of non-functional rubble from intertidal mudflats and shallow subtidal flats to make them more available as foraging areas for diving, swooping, and skimming birds, or construction of fish enhancement structures to increase productivity over that occurring on bare mud bottom. The scale of the project makes removal of non-functional revetment unsuited to the work because there are not enough locations around the Bay where this enhancement could be effectively implemented. An additional functional lift option has been the development of fish enhancement structures. However, these are generally less desired by resource agencies than eelgrass, and there are some locational siting considerations for enhancement structure development that limits opportunities for mitigation at the scale required for the drydock.

As a result, the drydock mitigation is planned to be eelgrass mitigation for eelgrass impacts and eelgrass mitigation for bay coverage impacts. The eelgrass impact mitigation is separate and distinct from the bay coverage mitigation requirements. Specifically, impacts to eelgrass vegetated bottom must be addressed independent of bay coverage. This means that the mitigation requirements are additive. As a result the project mitigation for eelgrass impacts is estimated to require the development of 0.16 acres of eelgrass for eelgrass mitigation (1.2:1 for impacts to 0.13 acre of impact) and 3.87 acres of eelgrass for bay coverage mitigation for a total mitigation requirement of 4.03 acres in the form of established eelgrass. While the impacts of bay coverage are known by engineered design, the impacts to eelgrass are estimated based on anticipated effects associated with work and would be dependent upon final impact determinations from surveys.

In addition to the project impacts, the present shipyard sediment remediation project is underway within BAE Systems San Diego Ship Repair yard. This work has been expected to result in impacts to 1.08 acres of eelgrass as a result of contaminated sediment removal (Merkel & Associates 2013). As such, the resultant mitigation needs for this work are expected to be approximately 1.30 acres, subject to post-construction surveys. To address this anticipated mitigation requirement in an efficient manner, there is a desire to complete both project mitigation obligations at the same location. This would result in a cumulative mitigation need of approximately 5.33 acres of restored eelgrass (Table 1).

Element and Impact Type	Impact	Mit: Impact Ratio	Mitigation Area
Pier 1 North Drydock			4.03 acres
Eelgrass impact	0.13 acre*	1.2:1	0.16 acre
Bay Coverage	3.87 acres	1:1	3.87 acres
Shipyard Sediment Remediation			1.30 acres
Eelgrass impact	1.08 acres*	1.2:1	1.30 acres
TOTAL			5.33 acres

Table 1. Eelgrass and Bay Coverage Mitigation Needs Summary

*Estimated impact to be ultimately determined based on pre-construction/post-construction surveys in accordance with the SCEMP (Shipyard Sediment Remediation) and the CEMP (Pier 1 North Drydock).

The 5.33-acre mitigation need represents an estimate based on predicted impacts to eelgrass. However, because impacts may vary from the estimate, both the SCEMP and CEMP rely on impact assessments that are based on pre-construction to post-construction changes in eelgrass extent and distribution patterns to ultimately determine the final scale of impacts. As a result, the final mitigation need may vary from this estimated mitigation need and the distribution of impacts between the two overlapping projects may vary as well.

TRANSPLANT SITE

TRANSPLANT SITE LOCATION

The selection of an eelgrass mitigation site has been driven by a number of factors. These include compatible land and water uses, proximity to existing eelgrass beds, and logistics and cost of site construction. Several sites were initially considered to achieve the mitigation goals for the two projects. These included raising the bay floor at the former A-8 Anchorage, creating two potential shallow water extensions of the south bay shallows located south of the Sweetwater River channel, backfill of portions of the former South Bay Power Plant (SBPP) cooling water intake channel, and expansion of the fills within the South Bay Borrow Pit that was partially filled to generate eelgrass in association with the Port's National City Wharf Extension Project. For many reasons, including adequate size of the mitigation site, limited jurisdictional issues, no navigation conflicts, limited risk of failure, and strong environmental community support, the selected mitigation site is located within the abandoned intake channel of the former SBPP (Figure 1). The approximately 300-foot wide channel was excavated in approximately 1954 to draw cooling water through the SBPP steam condensers. The channel was dredged through shallow bay and mudflat environments of the south bay. Subsequent to channel construction, one round of maintenance dredging was performed within the channel in 1992.

With the closure and removal of the power plant, the Port, agencies, and environmental groups have turned their focus to restoration of some of the original modifications that were made in the Bay to accommodate the power plant activities. One such opportunity that was identified by the Port, environmental groups, and resource agencies is the backfill of the SBPP intake channel to bring the elevations back in line with the historic elevations of the Bay. In total, such a backfill could restore approximately 30 acres of eelgrass as well as several acres of mudflats and marshlands. The present mitigation would initiate this restoration effort.

An ongoing planning effort is underway on the Chula Vista Bayfront that is examining opportunities to restore habitat connectivity throughout the Chula Vista Bayfront and surrounding habitat areas. One

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such opportunity under consideration is the connection of the waters on the north side of the Chula Vista Wildlife Island, located along the levee that separates the SBPP intake and discharge channels. If this were done, some configurations would favor maintaining the intake channel depths at the eastern, shoreward end of the channel. As such, the selected mitigation area is located at the western end of the channel so as not to foreclose any options under consideration on the Chula Vista Bayfront.

Coordination with National Marine Fisheries Service, including both the Protected Resources Division and the Southwest Fisheries Science Center turtle experts have determined that the presently proposed channel restoration to eelgrass is appropriate, but the continued use of the channel by green sea turtles may limit the full restoration of the channel.

The SBPP intake channel is surrounded by eelgrass on both long axis sides and at the west end of the channel. The channel was excavated to a floor elevation of approximately -11 to -12 feet MLLW but has subsequently accreted approximately 3 feet of unconsolidated sediment in the channel bottom, thus resulting in channel bottom depths of -8 to -9 feet MLLW. Along the channel margins, eelgrass has extended down the channel slopes slightly to depths that generally extend to around -5 feet MLLW. The distribution of eelgrass around the mitigation site is severely limited as a function of depth. In general, water shallower than -4.5 feet support eelgrass. However, a precipitous decline in percent cover of eelgrass occurs between -5 feet (97 percent eelgrass) and -7 feet (2 percent eelgrass) (Figure 2).



Figure 2. Natural Eelgrass Depth Distribution at South Bay Power Plant Intake Channel

TRANSPLANT SITE DREDGING/GRADING

<u>Design</u>

The proposed site would be constructed by raising the bottom elevations from an average of approximately -8.5 feet MLLW to a consolidated elevation of -4 feet MLLW over an area of slightly more than 7 acres. The site is oversized for the mitigation needs in order to ensure that the mitigation required is achieved (see further discussion below). The site would be constructed by placing approximately 80,000 cubic yards of clean sediment dredged from the outermost portion of the Pier 1 North drydock sump to raise the bay floor to elevations equal to the elevation of the adjacent bottom that supports eelgrass to the south and north of the site (Figure 3). Because of the presence of unconsolidated fine silts in the bottom of the channel, as well as the required slopes, a greater amount of sediment is required to construct the site then is suggested by the depth of fill and plantable area.

The mitigation site fills are depicted in multiple cross-sections (Figure 4). The fill would be buttressed against the slopes of the dredged intake channel. The fill varies along the slope edge slightly to avoid covering existing eelgrass. The fills to be placed within the mitigation area consist of a bottom layer comprised of cut formational material (approximately 48,000 cubic yards) capped by unconsolidated sands (estimated at 32,000 cubic yards) that dominate the top layers of sediment within the outer portion of the drydock sump excavation.

Fill material used to construct the mitigation site have been determined to be chemically and biologically suited for the beneficial reuse of constructing the eelgrass mitigation site in accordance with testing criteria under joint EPA and USACE manuals titled "Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual" (EPA and ACOE, 1998) (AMEC 2015).

Construction

Access to the mitigation site is complicated by virtue of a shallow shoal that separates the excavated intake channel from the deeper waters that run down the center portion of the south San Diego Bay. To address the access issues, a tightly defined access route has been identified and is to be marked along a 100-foot wide corridor. Contractor access shall be limited to accessing the site with work skiffs other work platforms when there is adequate clearance to avoid existing eelgrass. A floating pipeline will be

extended down the designated access corridor and into the site from a hydraulic offloader facility placed in the deeper water to the west of the site (Figure 5). It is anticipated that site construction will be accomplished by use of a clamshell dredge at the excavation site at Pier 1 in the BAE yard. The material would be hauled by scows to a temporarily moored hydraulic offloader placed approximately 2,000 feet west of the intake channel restoration site. The offloader would pump dredged material from the scows down a floating pipeline to the restoration site where it would be discharged from a spill barge that would move the end of the pipe around as needed to fill the channel to the desired elevations to support eelgrass.



Example of pipeline with floatation buoys.

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- Merkel & Associates, Inc.



_ Merkel & Associates, Inc.

The placement of fill at the site by hydraulic means provides protection against potential damage of eelgrass that could be associated with bringing scows across the shallow, eelgrass laden shoals. However, to avoid adverse effects of drift turbidity on eelgrass adjacent to the restoration area, tight turbidity control is required.

To protect eelgrass adjacent to the mitigation site during construction, a turbidity curtain adequate to extend to the bottom at all tides is to be placed along the entire boundary of the active fill area outside of existing eelgrass beds. This curtain differs from the standard turbidity curtain in that it will not be allowed to drift back and forth with changing tides but rather will be anchored along with its alignment using a number of vertical pipes driven into the bottom approximately every 50 feet along the northern and southern boundaries of the fill site (Figure 6). All curtain support posts are to be placed by the contractor prior to initiation of fill work. Because the work area is within proximity of the existing eelgrass beds for a length of approximately 1,600 feet, smaller segments of the fill area may be contained for filling the site in segments. The curtains would then be repositioned as needed to maintain a barrier between the eelgrass and the work area.



Figure 6. Boundary Marker and Turbidity Curtain

The curtains would include a heavy weighted ground chain that would keep the toe of the curtain affixed to the bay floor. This would assist in maintaining a small footprint of turbid water and would also provide for exclusion of green sea turtles from the habitat fill area. With the closed turbidity curtain a maximum temporary turtle exclusion area and containment turbidity plume would be 0.3 percent of the 3,000 acre South Bay ecoregion, or less than 0.1 percent of the total waters of San Diego Bay.

Placement of material by hydraulic pumping can be accomplished with less potential risk of damaging eelgrass as a result of access but may result in a greater water content in the placed material, and thus greater uncertainty with respect to settlement post construction. This can be controlled by monitoring the construction and the early post-placement settlement of material to develop consolidation curves to predict the extent of over overfilling of the site required to accommodate the bulking and subsequent consolidation over time. Because the final surface is to be capped with sand, hydraulic pumping is anticipated to provide a smooth, consistent, and ideal surface for eelgrass planting. While the proposed site design has a setback from existing eelgrass along the mitigation site margins, it is anticipated that slopes will relax and flatten and that the eelgrass on the mitigation plateau may likely merge with that of the surrounding bottom over time.

Areas around the mitigation site, including the access route, will require surveys prior to and following construction to ensure no additional impacts to eelgrass occurred. Any additional impacts that may occur in association with mitigation site construction would require further mitigation in accordance with the provisions of the CEMP.
Vertical tolerances of the plateau surface shall be limited to +/- 0.5 foot over 80 percent of the surface with not more than +/- 1.0 foot over 100 percent of the finished surface. The planting plateau surface will not be allowed to have variation in surface rugosity in excess of 8:1 slopes between high and low points on the planting surface. Depressed areas generally capture detritus and tend to not support eelgrass establishment. Over time, depressions generally silt in and will ultimately support eelgrass establishment but this may be delayed for several years. Given the vertical tolerances and surface variability requirements, the contractor may be required to drag the surface to achieve acceptable surface conditions.

EELGRASS MITIGATION REQUIREMENTS

The mitigation site is designed to support slightly over 7 acres of eelgrass transplant with the potential for some expansion along the fringes where shallow slopes below -4 feet MLLW would support additional eelgrass planting. The final yield of eelgrass bed development is expected to be less than the designed restoration site. However, it will meet the mitigation requirements if it achieves 5.33 acres of new eelgrass. Given the site location and robust nature of natural eelgrass within the same elevations adjacent to the site, the 76 percent coverage of the site required to meet the mitigation needs is anticipated to be achieved.

EELGRASS PLANTING PLAN

TRANSPLANT SITES

The transplant site to be used for mitigation purposes is shown in Figure 1. The proposed transplant area is slightly larger than 7 acres.

DONOR SITES

Donor eelgrass for the transplants of eelgrass is to be derived from natural eelgrass beds located adjacent to the Chula Vista Bayside Park (Figure 1). These donor beds have been primarily selected based on a number of factors:

- 1) Proximity to the transplant receiver site that favors both logistic convenience and selection of appropriate plant materials for the area;
- 2) Suitability of donor site size and eelgrass density to provide necessary transplant materials;
- 3) Recovery potential for the donor site;
- 4) Accessibility of the donor site; and,
- 5) Capacity to ensure safety to workers and the public while completing harvest work.

REFERENCE SITE

An eelgrass reference site has been established in an adjacent area to the north of the transplant site (Figure 1). This site has been selected based on proximity to and similarity in physical and biological characteristics to the proposed transplant site. Monitoring of the reference site should be conducted coincident with the monitoring of the transplant site. Changes in the reference site over time will be considered to represent natural environmental variability when evaluating the performance of the transplant site (see Monitoring Program sections).

RESTORATION METHODS

LETTER OF AUTHORIZATION AND NOTIFICATIONS

Prior to commencing eelgrass transplantation work, an amendment will be obtained from the California Department of Fish and Wildlife (CDFW) for the Scientific Collector's Permit (SCP) under which the transplant will occur. The SCP will authorize the collection of eelgrass from natural donor sites. In addition, a letter of authorization to plant eelgrass will be obtained from the California Department of Fish and Wildlife (CDFW) pursuant to §6400 of the California Fish & Game Code. The 7-acre planting program will require 28,336 planting units to be planted. The units will be comprised of approximately 6 turions each.

Following receipt of the planting authorization letter, a minimum five-day notification and a preliminary transplanting schedule must be provided to CDFW prior to commencement of the transplant work.

PLANT COLLECTION

Bare-root eelgrass plant material will be salvaged from the donor bed by "raking" rhizomes out of the surface sediment layers and loosely filling a mesh bag with salvaged material. In collecting eelgrass, care will be taken to work the rhizomes free as opposed to ripping the plants free of the sediment. This will preserve as much root material as possible. Salvaging is a mobile exercise and divers will move systematically through an area and collect/groom no more than 10% of the turions and associated rhizome and root material from any given square meter of the donor bed. Salvaged materials should consist of no less than three healthy internodal segments with well-developed root initiates and vigorous shoots. More intact rhizome segments and roots are preferred for use in the planting unit bundles.

Where donor material is removed, rhizomes of the donor plants almost always separate at rhizome nodes. Where this occurs, nodes generally scar over and rebud from meristem tissues within the node. Where damage at the severed node is more severe or the meristem is removed, the preceding node typically branches. The result is initiation of more extensive rhizome branching at the locations of plant material collection.

Collected material will be held in a flow-through seawater source or mesh bags suspended in the harbor until it is processed into planting units. No material will be stored for over 12 hours from harvesting to unit preparation. Once units are prepared, they will be stored in open water for no longer than 24 hours prior to planting.

TRANSPLANT UNITS

The proposed mitigation plan will utilize anchored bare-root transplant units. Bare-root transplants are the preferred means of transplanting eelgrass in most situations, and anchored bare- root units are the principal planting units used in large-scale restoration projects at the current time. The survival of such planting units has been shown to be quite high when properly prepared (Fonseca *et al.* 1982; Merkel 1987, 1990a). Similarly, bare-root units have shown an ability to rapidly expand and colonize bare substrate (Merkel 1990b). In addition to offering high unit survival and rapid expansion rates, bare-root units can be prepared with limited damage to the donor bed. Unlike plug extractions, bare-root units can be prepared using materials collected without substantial sediment disturbance. Each transplant unit for the project work will consist of approximately 6 turions.

The anchors used in this program will be biodegradable and pliable anchors such as those developed initially for transplants in Mission Bay's Sail Bay (Merkel 1987) and which have subsequently been used in more than 65 eelgrass restoration projects throughout California, Oregon, Washington, and Alaska.

PLANTING EELGRASS UNITS

A grid system will be used to control planting on the site. The grid will be laid out to control plant distribution, track progress on the restoration effort, and assist in completion of quality control inspections. The plant materials will be planted by excavating a hole in the sediments with a small trowel or by hand. The anchor will be planted parallel to the sediment surface and the root/rhizome bundle will be planted approximately 1 to 2 inches below the sediment surface with the anchor being placed approximately 5 inches below the sediment surface. During planting, spot checks of the plantings will be made to ensure proper planting depth and firmness of the anchoring system.

Planting unit spacing is typically determined by balancing the rate of bed establishment with the cost of the transplant project. In some instances, rapid bed establishment is required to minimize potential storm damage or scouring of unconsolidated rhizome mats. In other cases, rapid recovery rates are desirable to meet bed establishment milestone objectives. Taking into account the rate of eelgrass growth, a planting unit spacing of one meter on center will be used for the present transplant.

TIMING OF THE RESTORATION WORK

The proposed mitigation project will be implemented in two phases, followed by a monitoring program scheduled to extend over a 5-year post-planting period. The first phase of work is the construction of the mitigation site. Site construction work will be conducted concurrent with the dredging of the drydock sump. Site construction is anticipated to require approximately six to eight weeks to complete.

Once graded, a period of site stabilization and fill consolidation would be allowed. The site planting would occur within approximately 90 days following construction or the first spring following completion of site preparation, assuming that the site has adequately stabilized to accept planting units within this timeframe. Planting is anticipated to require 4 to 6 weeks to complete, based on the offshore location of the planting area that adds some complexity to the planting effort.

Monitoring would be initiated following planting and would extend for a 5-year period as outlined below.

MONITORING PROGRAM

ESTABLISHMENT MONITORING

Upon completion of the planting effort, a monitoring program would be initiated and continued for a 60-month (5-year) period as outlined in both the SCEMP and CEMP. Areal extent and density of the transplanted eelgrass and the natural reference site will be monitored using interferometric sidescan sonar acoustic survey techniques. The spatial distribution of eelgrass derived from acoustic survey will be supplemented with bed condition data collection including turion density, leaf length, epiphytic loading, and disease observations.

The monitoring program would be conducted at intervals of 0, 6, 12, 24, 36, 48, and 60-months posttransplant. When monitoring dates fall outside of the normal eelgrass-growing season, dates will be shifted to coincide with the growing season to ensure that valuable information on growth and survival is collected. For each monitoring interval, a summary report will be prepared and submitted to the BAE, resource agencies, and regulatory agencies within 30 days of completion of the monitoring survey.

Monitoring reports will include information from previous monitoring intervals, including numerical comparisons and graphical presentations of changing bed configurations. The monitoring report will include an analysis of any declines or expansions in eelgrass coverage based on physical conditions of the site, as well as any other significant observations. Finally, the monitoring report will provide a prognosis for the future of the eelgrass bed and will identify the timing for the next monitoring period.

MITIGATION SUCCESS CRITERIA

Mitigation will be deemed successful when it has met the success criteria outlined in the SCEMP and CEMP. Criteria for determination of transplant success will be based upon a comparison of vegetation coverage (area) and density (turions per square meter) between the reference sites and the transplant sites. The extent of vegetation cover is defined as the area where eelgrass is present and where gaps in coverage are less than one meter between individual turion clusters. Density of shoots is identified as the number of turions per meter, as measured from representative areas within the control or transplanted beds. Key success criteria are as follows:

- A) A minimum of 70 percent areal coverage and 30 percent density should be achieved after the first year.
- B) A minimum of 85 percent areal coverage and 70 percent density should be achieved after the second year.
- C) A minimum of 100 percent areal coverage and 85 percent density should be achieved for the third, fourth, and fifth years.

Areas that do not meet the above success criteria may be revegetated, and again monitored until the final goal is achieved. Should replanting of the areas at the project site fail to meet the success criteria; reconstruction of portions of the mitigation site may be required to carry out this revegetation.

REFERENCES

- Fonseca, Mark S., W. Judson Kenworthy, G. W. Thayer. 1982. A Low-Cost Planting Technique for Eelgrass (*Zostera marina L.*). Coastal Engineering Aid No. 82-6. U. S. Army Engineer Coastal Engineering Research Center, Fort Belvoir, Virginia. 15 pp.
- Merkel, Keith W. 1987. Use of a New Bio-Degradable Anchor Unit for Eelgrass (*Zostera marina*) Revegetation. Presented at the First California Eelgrass Symposium, Tiburon, California. 8-9 May 1987. Pages 28-42.
- Merkel, Keith W. 1990a. Eelgrass Transplanting in South San Diego Bay, California. In: K. W. Merkel and R. S. Hoffman, eds. Proceedings of the California Eelgrass Symposium, Chula Vista, California, May 27-28, 1988. Pages 28-42.
- Merkel, Keith W. 1990b. Growth and Survival of Transplanted Eelgrass: the Importance of Planting Unit Size and Spacing. In: K. W. Merkel and R. S. Hoffman, eds. Proceedings of the California Eelgrass Symposium, Chula Vista, California May 27-28, 1988. Pages 70-78.
- Merkel & Associates, Inc. 2011. 2011 San Diego Bay Eelgrass Inventory Update. Prepared for the U.S. Navy and Port of San Diego. December 2011.
- Merkel & Associates, Inc. 2013. Baseline Eelgrass Report for the San Diego Shipyard Sediment Matter Cleanup and Abatement Order No. R9-2012-0024: San Diego Bay Environmental Restoration Fund –North Trust. May 13, 2013.
- National Marine Fisheries Services. 1991, as revised. Southern California Eelgrass Mitigation Policy. Revision 11.
- NOAA Fisheries, West Coast Region. 2014. California Eelgrass Mitigation Policy and Implementing Guidelines. October 2014.
- U.S. Environmental Protection Agency and U.S Army Corps of Engineers . 1998. Evaluation of Dredged Material Proposed For Discharge in Waters of the U.S. Testing Manual (Inland Testing Manual). February 1998.

APPENDIX A. CONSTRUCTION PLANS PIER 1 NORTH DRY DOCK PROJECT SOUTH BAY EELGRASS RESTORATION SITE



						REVISIONS	
		REV	DATE	BY	APP'D	DESCRIPTION	DESIGNED BY: R. PETRUCCELLI
							DRAWN BY: L. MURAI/R. PETRUCCELLI
Markel & Associates Inc.							CHECKED BY: K. MERKEL
Merket & Associates, Inc	CONSTRUCTION FLANS						APPROVED BY:
							SCALE: AS INDICATED
							DATE: AUGUST 27, 2015

Corridor Boundary Markers					
Points	Easting	Northing	Points	Easting	Northing
1	6,293,634 E	1,807,349 N	15	6,294,870 E	1,806,691 N
2	6,293,598 E	1,807,255 N	16	6,294,834 E	1,806,596 N
3	6,293,811 E	1,807,255 N	17	6,295,046 E	1,806,596 N
4	6,293,775 E	1,807,161 N	18	6,295,010 E	1,806,502 N
5	6,293,987 E	1,807,161 N	19	6,295,222 E	1,806,502 N
6	6,293,951 E	1,807,067 N	20	6,295,186 E	1,806,407 N
7	6,294,164 E	1,807,067 N	21	6,295,399 E	1,806,408 N
8	6,294,128 E	1,806,973 N	22	6,295,362 E	1,806,312 N
9	6,294,340 E	1,806,973 N	23	6,295,575 E	1,806,314 N
10	6,294,304 E	1,806,879 N	24	6,295,538 E	1,806,217 N
11	6,294,517 E	1,806,879 N	25	6,295,752 E	1,806,220 N
12	6,294,481 E	1,806,785 N	26	6,295,714 E	1,806,123 N
13	6,294,693 E	1,806,785 N	27	6,295,928 E	1,806,125 N
14	6,294,657 E	1,806,691 N	28	6,295,890 E	1,806,028 N

PIER 1 NORTH DRY DOCK PROJECT



SOUTH BAY EELGRASS RESTORATION SITE ACCESS ROUTE

SHEET NO. 13 OF 16





SPECIAL ENVIRONMENTAL NOTES:

EELGRASS PROTECTION

- 1. EELGRASS HABITAT OCCURS ADJACENT TO THE NORTH WESTERN EDGE OF THE DRYDOCK DREDGE AREA AND ADJACENT TO THE SOUTH BAY EELGRASS RESTORATION SITE. EXISTING EELGRASS SHALL BE PRO-TECTED BY THE CONTRACTOR.
- 2. THE OWNER RETAINED PROJECT BIOLOGIST WILL COMPLETE PRE-CONSTRUCTION AND POST-CONSTRUCTION EELGRASS SURVEYS PRIOR TO AND FOLLOWING CONSTRUCTION. THE RESULTS OF THESE SURVEYS WILL BE PROVIDED IN DIGITAL FORMAT TO THE CONTRACTOR FOR USE IN SETTING WORK BOUNDARIES.
- 3. TO MINIMIZE EELGRASS IMPACTS THE CONTRACTOR SHALL ESTABLISH TEMPORARY WORK BOUNDARY MONUMENTS AND SHALL DEPLOY TUR BIDITY CURTAINS ALONG THE EDGE OF EELGRASS TO REMAIN DURING AND FOLLOWING CONSTRUCTION.
- a. THE EELGRASS BOUNDARY MARKERS SHALL BE POSITIONED AT LEAST EVERY 50 FEET ALONG THE EDGE OF EELGRASS HABITAT AT LOCATIONS TO BE NOTED BY TEMPORARY PVC PIPES OR SELF CEN-TERING BUOYS PLACED BY THE OWNER'S PROJECT BIOLOGIST.
- b. CONTRACTOR SET MARKERS SHALL CONSIST OF AT LEAST 2-INCH STEEL POSTS SET INTO THE BOTTOM TO A DEPTH ADEQUATE TO RETAIN TURBIDITY CURTAIN HYDRODYNAMIC LOADING AND PERSIST THROUGHOUT THE CONSTRUCTION PERIOD.
- c. TURBIDITY CURTAINS PLACED ALONG THE SITE BOUNDARY SHALL EXTEND A MINIMUM OF 200 FEET BEYOND ANY ACTIVE SEDIMENT PLACEMENT LIMITS. NOT ALL OF THE TURBIDITY CURTAIN MUST BE IN POSITION DURING THE WORK, BUT BOTH THE NORTH AND SOUTH SIDES OF THE FILL AREA MUST BE BOUNDED DURING FILL PLACE-MENT EXTENDING ALONG THE CHANNEL SUCH THAT A MINIMUM OF 200 FEET OF CURTAIN LENGTH EXISTS BEYOND ANY PLACEMENT
- d. IF FILL IS PLACED HYDRAULICALLY, CURTAINS MUST BE FULLY CLOSED WITHIN 200 FEET OF FILL PLACEMENT DURING THE PUMPING PERIOD.
- e. CONTRACTOR AND PROJECT BIOLOGIST SET MARKERS SHALL BE REMOVED AT COMPLETION OF THE PROJECT WORK. THE CURTAINS SHALL BE KEPT IN PLACE FOR FILL PLACEMENT UNTIL SUCH TIME AS THE TURBIDITY WITHIN THE CURTAIN ACHIEVES TURBIDITY LEVELS THAT ARE LESS THAN 15 PERCENT ABOVE AMBIENT LEVELS OUTSIDE OF THE CURTAIN.
- 4. EELGRASS OCCURS OVER A SHALLOW SHOAL ALONG THE ACCESS ROUTE INTO THE SOUTH BAY EELGRASS RESTORATION SITE (THE FORMER SOUTH BAY POWER PLANT COOLING WATER INTAKE CHANNEL TO BE BACKFILLED TO RESTORE EELGRASS). REFER TO "SOUTH BAY EELGRASS RESTORATION SITE ACCESS NOTES." TURBIDITY MONITORING SHALL BE PROVIDED BY THE OWNER'S PROJECT BIOLOGIST.

EELGRASS RESTORATION FILL PLACEMENT

5. THE CONTRACTOR SHALL PROVIDE AN EELGRASS HABITAT SITE CON-STRUCTION PLAN TO THE PROJECT ENGINEER AND PROJECT BIOLOGIST FOR REVIEW AND APPROVAL AT LEAST 4 WEEKS PRIOR TO CONSTRUC-TION. HABITAT RESTORATION CONSTRUCTION SHALL NOT BEGIN UNTIL THE PROJECT ENGINEER AND PROJECT BIOLOGIST APPROVES THE PLAN. THE PLAN SHALL OUTLINE THE METHOD OF CONSTRUCTION FOR PLACE-MENT OF LOWER BASE AND UPPER CAP MATERIALS. THE PLAN SHOULD PROVIDE A MEANS TO CONTROL MATERIAL PLACEMENT AND WATER QUALITY, TO MONITOR FILL QUALITY DIRECTED TO THE SOUTH BAY, PLACEMENT HEIGHT AND SETTLEMENT AND EFFECTIVENESS OF PRO-POSED TURBIDITY MEASURES, AND ANY REMEDIAL MEASURES THAT THE CONTRACTOR WILL TAKE TO ENSURE PROJECT AND PERMIT COMPLI-ANCE. THE PLAN SHALL ALSO INDICATE EQUIPMENT PROPOSED TO FUL-FILL THE CONSTRUCTION. IF STAGING FOR SCOWS/BARGES, OR DEVEL-OPMENT OF AN UNLOADING FACILITY OUTSIDE OF THE FILL SITE IS REQUIRED, CONTRACTOR SHALL PROVIDE A STAGING AND MANAGEMENT PLAN FOR THIS WORK.

- 6. IDEAL CONDITIONS FOR EELGRASS GROWTH IN SOUTH SAN DIEGO BAY OCCUR WITHIN A NARROW ELEVATION RANGE WITH THE MAXIMUM EEL-GRASS COVER RANGING BETWEEN -1 FOOT MLLW AND -4 FEET MLLW. TO ACHIEVE THIS DESIRED BATHYMETRIC RANGE, A FINAL CONSOLIDATED TARGET HABITAT ELEVATION OF NOT LESS THAN -4 FEET MLLW IS RE-QUIRED. ELEVATIONS MAY VARY UPWARD UP TO -3 FEET MLLW.
- THE UNCONSOLIDATED FILL ELEVATION NECESSARY TO ACHIEVE A FINAL 7. CONSOLIDATED FILL AT -4 FEET MLLW IS DEPENDENT UPON MATERIAL EXCA-VATION AND PLACEMENT METHODS. FOR THIS REASON, FILL VOLUMES HAVE BEEN CALCULATED AS BANK VOLUMES AS IT IS DERIVED FROM THE DREDGE EXCAVATION SITE.
- 8. CONTRACTOR SHALL PLACE FILL TO ELEVATIONS NECESSARY FOR THEIR DREDGE AND FILL METHODOLOGIES TO ENSURE CONSOLIDATED ELEVA-TIONS ARE ACHIEVED OVER THE EELGRASS RESTORATION SITE.
- 9. CONTRACTOR MAY INITIALLY OVERFILL ELEVATIONS UP TO A MAXIMUM OF -1 FOOT MLLW IF REQUIRED TO ACHIEVE FINAL SETTLEMENT ELEVATIONS AT OR ABOVE -4 FEET MLLW
- 10. CONTRACTOR SHALL PERFORM A DEMONSTRATION OF THEIR BASE FILL PLACEMENT METHODOLOGY AND SHORT-TERM SETTLMENT IN PLACED FILLS
 - a. THE CONTRACTOR SHALL DEMONSTRATE MANAGEMENT OF VESSEL DRAFT AND ACCESS OVER THE EELGRASS COVERED SHOAL TO AVOID EELGRASS DAMAGE
 - b. THE CONTRACTOR SHALL DEMONSTRATE TURBIDITY CONTROL MEA-SURES DURING MATERIAL PLACEMENT.
 - c. THE CONTRACTOR SHALL PLACE BASE FILL TO AN ELEVATION THE CON TRACTOR BELIEVES NECESSARY TO MEET FINAL FILL GRADES MINUS A STABILIZED 2.0 FOOT SAND SURFACE CAP. THE PLACED MATERIAL SHALL BE MONITORED BY MULTIBEAM BATHYMETRIC SURVEYS FOR 20 DAYS TO TRACK CONSOLIDATION DETERMINE HOW FILL IS LIKELY TO PERFORM THROUGH LONG-TERM CONSOLIDATION. SURVEYS SHALL BE CONDUCTED ON DAYS 0, 1, 2, 3, 5, 10, 15, AND 20, POST PLACEMENT
 - d. THE CONTRACTOR MAY PROGRESS WITH BASE FILL PLACEMENT ELSE-WHERE DURING THIS CONSOLIDATION MONITORING PERIOD BUT MAY BE REQUIRED TO SUBSEQUENTLY RAISE THE FILL ELEVATIONS IF RE-QUIRED BASED ON THE OUTCOME OF THE MONITORING PROGRAM.
 - e. THE INITIAL MONITORING SHALL BE USED TO DETERMINE IMMEDIATE SETTLEMENT AND EARLY PRIMARY CONSOLDATION SETTLEMENT. IT WILL ALSO ASSIST IN UNDERSTANDING DISPLACEMENTS OF THE SOFT MUD LAYER WITHIN THE CHANNEL. JE SEDIMENT IS DISPLACED AS FILL IS PLACED, ACTION SHALL BE TAKEN TO ENSURE THAT THE DISPLACE-MENT DOES NOT RESULT IN OVERRUN OF EXISTING EELGRASS. THIS LIKELY CAN BE ENSURED BY FILLING WEST TO EAST; HOWEVER OTHER METHODS MAY EXIST IF MANAGEMENT OF DISPLACED MUD IS RE-QUIRED
- BASED ON THIS DEMONSTRATION PROJECT, CONTRACTOR SHALL ESTABLISH ITS TARGET FOR BASE FILL PLACEMENT ALLOWING FOR A 2.0 FOOT FILL OF ZONE A SAND OVER THE FINAL FILL AREA.
- 11. THE LOWER BASE FILL SHALL BE CAPPED WITH A SAND LAYER (UPPER CAP). DERIVED FROM THE WESTERN DREDGE AREA. THE THICKNESS OF THE CAP SHALL BE 2-FEET (+/- 0.5 FEET).
- 12. THE FINAL SURFACE ELEVATION SHALL BE -4 FEET MLLW WITH VARIANCE OF +1 FOOT (I.E. UP TO -3 FEET MLLW). AND SHALL HAVE NO SLOPES GREATER THAN 10:1 (RUN:RISE). THE SURFACE SHALL NOT HAVE ANY AREAS BELOW -4 FEET MLLW AT THE "DEMONSTRATION PROJECT" PRE-DICTED FINAL ELEVATION
- 13. THE CONTRACTOR SHALL FINISH THE UPPER CAP LAYER TO MAKE SURE THAT IT MEETS THE SLOPE REQUIREMENTS AND HAS NO EXPOSED CON-SOLIDATED SEDIMENT BLOCKS FROM THE BASE FILLS, OR ROUGH SUR-FACE CONDITIONS AREAS WHERE THE TOPOGRAPHY VARIES EXTENSIVELY (+/- 0.5 FEET) WITH SLOPES LESS THAN 10:1 THE CONTRACTOR MUST SMOOTH THE CAP USING A DRAG, BUCKET SWEEP, OR OTHER MEANS TO ACHIEVE PLANTABLE CONDITIONS. THE SURFACE WILL BE INSPECTED BY THE PROJECT BIOLOGIST TO VERIFY ACCEPTABLE CONDITIONS FOR EEL-GRASS RESTRATION

BOUNDARY MARKER AND TURBIDITY CURTAIN ATTACHMENT DETAIL:



FILL DETAIL:





TYPICAL FILL PLACEMENT SECTION

SPECIAL ENVIRONMENTAL NOTES

SHEET NO. 16 OF 16

Exhibit 3 Figures

















1.1 Purpose

The purpose of this Mitigation Monitoring and Reporting Program (MMRP) is to ensure that the BAE Systems Waterfront Improvement Project implements the environmental mitigation measures required by the Final Environmental Impact Report (EIR) for the proposed project. Those mitigation measures have been integrated into this MMRP. The MMRP provides a mechanism for monitoring and reporting implementation of the mitigation measures in compliance with the EIR, and general guidelines for the use and implementation of the monitoring program are described below.

This MMRP is written in accordance with California Public Resources Code 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines. California Public Resources Code Section 21081.6 requires the Lead Agency, for each project that is subject to CEQA, to adopt a reporting or monitoring program for changes made to the project, or conditions of approval, adopted in order to mitigate or avoid significant effects on the environment and to monitor performance of the mitigation measures included in any environmental document to ensure that implementation takes place. The San Diego Unified Port District (District) is the designated Lead Agency for the MMRP. The Lead Agency is responsible for review of all monitoring reports, enforcement actions, and document disposition. The Lead Agency will rely on information provided by a monitor as accurate and up to date and will field check mitigation measure status as required.

The District may modify how it will implement a mitigation measure, as long as the alternative means of implementing the mitigation still achieves the same or greater impact reduction. Copies of the MMRP shall be distributed to the participants of the monitoring effort to ensure that all parties involved have a clear understanding of the mitigation monitoring measures adopted.

1.2 Format

Mitigation measures applicable to the project include avoiding certain impacts altogether, minimizing impacts by limiting the degree or magnitude of the action and its implementation, and/or requiring supplemental structural controls. Within this document, mitigation measures are organized and referenced by subject category. Each of the mitigation measures has a numerical reference. The following items are identified for each mitigation measure.

- Mitigation Language and Numbering
- Mitigation Timing
- Methods for Monitoring and Reporting
- Responsible Parties

1.3 Mitigation Language and Numbering

Provides the language of the mitigation measure in its entirety.

1.4 Mitigation Timing

The mitigation measures required for the project will be implemented at various times before construction, during construction, prior to project completion, or during project operation.

1.5 Methods for Monitoring and Reporting

The MMRP includes the procedures for documenting and reporting mitigation implementation efforts.

1.6 Responsible Parties

For each mitigation measure, the parties responsible for implementation, monitoring and reporting, and verifying successful completion of the mitigation measure are identified.

Mitigation Measures	Timing and Methods	Responsible Parties
Biological Resources		
MM-BIO-1: Implement Construction Measures to Eliminate	Timing: During construction	Implementation: Project
Water Quality Impairment Impacts on California Least Tern	Method: Implement construction measure	Manager, and General Contractor
and California Brown Pelican Foraging. Nesting birds are less	and comply with regulatory requirements	
stressed where for aging opportunities are available adjacent to	to avoid impacts to California Least Tern	Monitoring and Reporting:
available forage and increase the likelihood of successfully	opportunities.	Project Proponent
fledging chicks. The project proponent shall implement the	rr -	Verification: District
following construction measures in accordance with regulations,		
including CWA Sections 401 and 404, Rivers and Harbors Act		
Section 10, the NPDES permit, and Stormwater Management and		
Discharge Control Ordinance:		
• The contractor shall deploy a turbidity curtain around the pile driving areas to restrict the visible surface turbidity plume to the area of construction and pile driving. It shall consist of a hanging		
ballast-weighted curtain with a surface float line and shall		
extend from the surface into the water column without		
curtain shall meet the specifications for design installation use		
performance, and/or modification outlined in the District's <i>Best</i>		
Management Practices and Environmental Standards for		
Overwater Structural Repair and Maintenance Activities for		
District (District 2019). The goal of this measure is to minimize		
the area in which visibility of prey by terns and pelicans is		
obstructed.		
• The contractor shall follow all regulatory requirements to		
minimize reduction in water quality in San Diego Bay.		
and implementation of a Construction BMP Plan in accordance		
with the District's JRMP, and compliance with appropriate		

Table 1. Mitigation, Monitoring, and Reporting Program

regulatory permits, including the CWA Section 401 Water

Mitigation Measures	Timing and Methods	Responsible Parties
Quality Certification, CWA Section 404 permit, and Rivers and Harbors Act Section 10 permit. A full explanation of these requirements can be found in Section 4.5, <i>Hydrology and Water</i> <i>Quality</i> .		
MM-BIO-2: Avoid Nesting Season for Birds or Conduct	Timing: Prior to construction	Implementation: Project Proponent
Preconstruction Nesting Surveys. To ensure compliance with	Method: Avoid nesting season of conduct	roponene
the MBTA and similar provisions under Sections 3503 and 3503.5	nesting bird surveys	Monitoring and Reporting:
of the California Fish and Game Code, the project proponent shall	0	Qualified ornithologist, approved
conduct all construction activities between October 1 and		by the District, Project Proponent
February 14 (i.e., outside the nesting season) to the extent		
feasible. If construction activities are scheduled between		Verification: District
February 15 and September 30, the project proponent shall		
implement the following during construction:		
• The project proponent shall retain a qualified biologist (with		
knowledge of the species to be surveyed) who shall conduct a		
focused nesting bird survey within potential nesting habitat		
prior to the start of any construction activities. The survey shall		
survey and the buffer area defined below if any prior to the		
commencement of construction on the project site.		
• The nesting bird survey area shall include the entire limits of		
disturbance plus a 500-foot buffer, to ensure indirect impacts		
would be avoided. The nesting surveys shall be conducted within		
1 week prior to initiation of construction activities and shall		
consist of a thorough inspection of the project area by a qualified		
ornithologist(s). The survey shall occur between sunrise and		
12:00 p.m., when birds are most active. If no active nests are		
documenting the results shall be prenared and provided to the		
District. If there is a delay of more than 7 days between when the		
nesting bird survey is performed and construction activities		
begin, the qualified biologist shall resurvey to confirm that no		
new nests have been established.		
• If the survey confirms nesting within 500 feet of construction		
activities, a no-disturbance buffer shall be established around		

Mitigation Measures	Timing and Methods	Responsible Parties
each nest site to avoid disturbance or destruction of the nest until after the nesting season or a qualified ornithologist determines that the nest is no longer active. The size and constraints of the no-disturbance buffer shall be determined by the qualified biologist at the time of discovery, but shall not be greater than 500 feet.		
MM-BIO-3: Implement a Marine Mammal and Green Sea	Timing: Prior to and during construction	Implementation: Project Proponent
Turtle Monitoring Program During Pile Installation Activities. Prior to construction activities involving in-water pile installation or vibratory pile removal, the project proponent shall prepare a marine mammal and green sea turtle monitoring program for implementation. This monitoring program shall be submitted to the District for approval 60 days prior to commencing construction involving in-water pile installation or	Method: Monitoring for marine mammals and green sea turtles during installation of piles or vibratory pile removal.	Monitoring and Reporting: Qualified ornithologist, approved by the District, Project Proponent Verification: District
vibratory pile removal and shall include the following		
 For a period of 15 minutes prior to the start of in-water construction, a qualified biologist, retained by the project proponent and approved by the District, shall monitor an impact radius around the active pile installation areas to ensure that special-status species are not present. The qualified biologist must meet the minimum requirements as defined by the NOAA's <i>Guidance for Developing a Marine Mammal Monitoring Plan</i> (2017). The impact radius shall be established by determining the largest ZOI associated with in-water construction activities occurring that work day, as shown in Table 4.2-4. The construction contractor shall not start work if any observations of special-status species are made prior to starting pile installation. 		
In-water pile driving within the shipyard shall begin with soft starts in accordance with Section 4.5 of the District's Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port		

Mitigation Measures	Timing and Methods	Responsible Parties
 District (District 2019), gradually increasing the force of the pile driving. Monitoring by a qualified biologist for marine mammals and green sea turtles within appropriate ZOIs shall be implemented during all pile installation activities by identifying when any special-status species are approaching or within the appropriate ZOI, and by coordinating with construction crews to halt pile driving until the species have left this area. 		
 MM-BIO-4: Implement Overwater Coverage Mitigation in Coordination with the Appropriate Resource Agencies and the District to Compensate for Loss of Open Water Habitat. The project proponent shall implement the following: 1. As required by applicable law or regulation, the project proponent shall consult with the appropriate resource agencies regarding mitigation of impacts associated with loss of beneficial uses from overwater coverage and loss of open water habitat function. 	 Timing: Prior to commencement of construction activities for Project Elements 2, 6, and/or 9 Method: Mitigate for the loss of open water habitat either in the San Diego Bay or in a suitable in-lieu fee program or mitigation bank within the Coastal Zone 	Implementation: Project Proponent Monitoring and Reporting: Project Proponent Verification: District
2. Prior to the commencement of construction activities for Project Elements 2, 6, and/or 9, the project proponent shall implement one of the following mitigation options, or a combination thereof, that are listed below in order of preference of the District; however, selection of 2.A, 2.B, 2.C, and 2.D, or an equivalent combination thereof, as may be required through consultation with applicable resource agencies during permitting processes, would successfully reduce Impact-BIO-4 to a level below significance. The below options provide the minimum mitigation for overwater coverage impacts. One or more of the appropriate resource agencies may require additional or greater mitigation than specified in this mitigation measure. This in no way supersedes mitigation measures that may be required by state and federal agencies.		

Mitigation N	leasures	Timing and Methods	Responsible Parties
A.	Remove the equivalent amount of existing overwater coverage corresponding to the net increase in overwater coverage for Project Element 2 (6,960 square feet), Project Element 6 (5,885 square feet), and Project Element 9 (80 square feet) within San Diego Bay, which would replace the area affected by the proposed project at a 1:1 mitigation ratio, subject to the District's review and approval. Should Project Elements 2, 6, and 9 all be implemented, a total of 12,925 square feet of existing overwater coverage shall be removed. If evidence is presented to the District that demonstrates that all or a portion of the required removal of overwater coverage is infeasible, the project proponent shall implement 2.B.		
В.	Restore or create the equivalent amount of eelgrass habitat corresponding to the net increase in overwater coverage for Project Element 2 (6,960 square feet), Project Element 6 (5,885 square feet), and Project Element 9 (80 square feet) at a suitable location within San Diego Bay at a 1:1 ratio, which would offset the net increase in overwater coverage for these project elements, subject to the District's review and approval. Should Project Elements 2, 6, and 9 all be implemented, a total of 12,925 square feet of eelgrass habitat shall be restored or created to offset the total net increase in overwater coverage. Prior to the commencement of construction activities for Project Elements 2, 6, and/or 9, the project proponent shall submit a mitigation plan for review and approval by the District. The mitigation plan at a minimum shall include a description of the transplant site, eelgrass mitigation requirements,		

Mitigation Measures	Timing and Methods	Responsible Parties
eelgrass planting plan (e.g., transplant sites, donor		
sites, reference site), restoration methods (e.g., plan	t	
collection, transplant units, planning eelgrass units),		
timing of the restoration work, and a monitoring		
program (e.g., establishment of monitoring and		
mitigation success criteria). The project proponent		
shall secure all applicable permits and all applicable		
Real Estate agreements for the mitigation site prior		
to commencement of waterside construction.		
Additionally, the project proponent shall ensure that	t	
all fill materials proposed for discharge into San		
Diego Bay for the development of the mitigation site		
shall meet the requirements of the U.S. Army Corps of	of	
Engineers' Evaluation of Dredged Material Proposed		
for Discharge in Waters of the U.S. – Testing Manual		
(Inland Testing Manual). If evidence is presented to		
the District that demonstrates that restoration or		
creation of all or a portion of the required amount of		
eelgrass habitat specified above is infeasible, the		
project proponent shall implement 2.C.		
C. If a suitable in lieu fee program or mitigation bank		
within the Coastal Zone that is not yet available		
becomes available in the future, prior to construction	n	
of the proposed project, the project proponent shall		
purchase saltmarsh wetland or overwater coverage		
credits to offset the net increase in overwater		
coverage for Project Element 2 (6,960 square feet),		
Project Element 6 (5,885 square feet), and Project		
Element 9 (80 square feet), or 12,925 total square		
feet of overwater coverage should all of these projec	t	
elements be implemented. If evidence is presented t	0	
the District that demonstrates that purchase of		

Mitigation Measures	Timing and Methods	Responsible Parties
credits toward an in lieu fee program or mitigation bank is infeasible, the project proponent shall implement 2.D.		
D. Subject to the Board of Port Commissioners' approval and findings, the project proponent may purchase credits from the District's shading credit program established pursuant to Board Policy 735 at a fair market value equivalent to that of the proposed project's final shading total (i.e., less any reductions achieved by design modifications to the satisfaction of the appropriate resource agencies).		
3. The project proponent shall secure all applicable permits for the mitigation of overwater coverage prior to commencement of waterside construction. One or more of the appropriate resource agencies may require additional or greater mitigation than specified under options 2.A, 2.B, 2.C, and 2.D of this mitigation measure. This in no way supersedes mitigation measures that may be required by state and federal agencies.		
MM-BIO-5: Implement Eelgrass Protection Measures and CEMP Compliance. Prior to commencing in-water construction	Timing: Prior to commencing construction activities for Project Element 7	Implementation: Project Proponent
activities for Project Element 9, the project proponent shall implement the following measures to ensure protection of eelgrass beds.	Method: Perform a preconstruction eelgrass survey and education of the contractor, install a silt curtain during	Monitoring and Reporting: Project Proponent
 Adhere to the Clean Water Act Section 404 permitting process and ensure California Eelgrass Mitigation Policy compliance through the Section 404 permit and coordination with the National Marine Fisheries Service. 	dredging of rock or sediment, and during quay wall modifications, and perform a post-construction survey.	Verification: District

San Diego Unified Port District

Mitigation Measures	Timing and Methods	Responsible Parties
 Perform a preconstruction eelgrass survey in accordance with the California Eelgrass Mitigation Policy. 		
• Temporarily install a silt curtain to contain turbidity during all in-water construction activities for Project Elements 1 through 9.		
 Provide results of the preconstruction eelgrass survey during a contractor education meeting and instruct the contractor not to contact the bottom or stage vessels over eelgrass vegetated areas and instruct that the use of a silt curtain is necessary during all in-water construction activities for Project Elements 1 through 9. 		
 Perform a post-construction eelgrass survey in accordance with the California Eelgrass Mitigation Policy to validate protection of adjacent eelgrass beds following construction. In the event that unforeseen impacts to eelgrass occur, those impacts would be mitigated by increasing the amount of restoration or withdrawal of eelgrass mitigation bank credits as specified under MM-BIO-4, subsection 2.B, or as may be otherwise required by applicable regulatory agencies to ensure CEMP compliance, and utilizing the methods and standards as may be required by the regulatory agencies. 		
Greenhouse Gas Emissions and Energy		
MM-GHG-1: Implement Diesel Emissions Reduction Measures During Project Construction. The project proponent shall	Timing: Prior to and during project construction	Implementation: Project Proponent
Implement the following measures during project construction	Method: Implement measures to limit idling times and properly maintain	Monitoring and Reporting: Project Proponent

Mitigation Measures	Timing and Methods	Responsible Parties
and, where specified below, submit reports to the District for its	construction equipment to reduce diesel	
review and approval, evidencing compliance.	emissions	Verification: District
 The project proponent shall limit all construction equipment and haul truck idling times by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. The project proponent shall install clear signage regarding the limitation on idling time at the delivery driveway and loading areas and submit quarterly reports of violators to the District. BAE System supervisors shall enforce this measure, and repeat violators shall be subject to penalties pursuant to the California Airborne Toxics Control Measure, 13 CCR 2485. The project proponent shall submit evidence of the use of diesel reduction measures to the District's Development Services Department through annual reporting, with the first report due 1 year from the date of project completion. The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities, with respect to using diesel-powered vehicles or equipment has been checked by a mechanic experienced with such equipment and determined to be running in proper condition prior to admittance into the delivery driveway and loading areas. The project proponent shall submit a report by the mechanic experienced with such equipment of the condition of the construction and operations vehicles and equipment to the District's Development Services Department prior to commencement of their use. 		
MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures. As a condition of all discretionary actions and (or Coastal Development Permits, the	Timing: Prior to construction and operation	Implementation: Project Proponent
project proponent shall be required to implement the following measures to be consistent with the Climate Action Plan:	Method: Implement measures to be consistent with the Climate Action Plan	Monitoring and Reporting: Project Proponent
A. Reduce indoor water consumption to 20 percent lower than baseline buildings (defined by Leadership in		Verification: District

Mitigation Measures	Timing and Methods	Responsible Parties
Energy and Environmental Design [LEED] as indoor water use after meeting Energy Policy Act of 1992 fixture performance requirements) through use of low- flow fixtures in all administrative and common-area bathrooms.		
B. Comply with AB 341, the City of San Diego Construction and Demolition Debris Deposit Ordinance, and the City of San Diego Recycling Ordinance. This shall include implementing a recycling program to support the statewide goal of diverting 75 percent of solid waste from landfills by 2020 in accordance with AB 341. This measure shall be applied during construction and operation of the proposed project.		
C. Use only fluorescent lights, light-emitting diodes (LEDs), compact fluorescent lights (CFLs), or the most energy- efficient lighting that meets required lighting standards and is commercially available. This measure also requires replacement of existing lighting on the project site if not already highly energy efficient.		
D. Implement a Transportation Demand Management (TDM) Plan during construction that includes elements such as the promotion of ride sharing and carpooling, restricts PM peak-hour trips, and provides subsidized transit passes for construction workers to reduce worker trips and parking demand.		
E. Use recycled, regional, and rapidly renewable materials where appropriate during project construction.		
F. Install occupancy sensors for all vending machines in new buildings at the project site.		

San Diego Unified Port District

Mitigation Measures		asures	Timing and Methods	Responsible Parties
G.	Im un and	plement onsite renewable energy at new buildings, less the system cannot be built in light of structural d operational constraints.		
H.	Inc exc En im	corporate energy efficiency design features that ceed the most recent Title 24 California Building ergy Efficiency Standards. Measures that may be plemented include:		
	0	High-performance glazing with a low solar heat gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination;		
	0	Increased insulation;		
	0	Cool roofs with an R value of 30 or better;		
	0	Sun shading devices, as appropriate;		
	0	High-efficiency heating, ventilating, and air- conditioning systems and controls;		
	0	Programmable thermostats;		
	0	Variable-frequency drives; and		
_	0	High-efficiency indoor and outdoor lighting and control systems. Ensure all outdoor lighting is equipped with LED fixtures.		
MM-GHG-3: Use Modern Vessels and Dredgers. Prior to commencing dredging during waterside construction, the project proponent shall ensure that tugboats, survey vessels, and dredgers for use during the duration of all dredging activities meet Tier 3 or better (cleaner) emission standards. If Tier 3 or better (cleaner) tugboats, survey vessels, and dredgers are not available within 200 miles of the BAE Systems leasehold for the		se Modern Vessels and Dredgers. Prior to redging during waterside construction, the project	Timing: Prior to commencing dredging during waterside construction	Implementation: Project Proponent
		ll ensure that tugboats, survey vessels, and se during the duration of all dredging activities better (cleaner) emission standards. If Tier 3 or	Method: Ensure tugboats, survey vessels, and dredgers to be used during all dredging activities meet Tier 3 or better (cleaner)	Monitoring and Reporting: Project Proponent
) tugboats, survey vessels, and dredgers are not n 200 miles of the BAE Systems leasehold for the	emission standards.	Verification: District

Mitigation Measures	Timing and Methods	Responsible Parties
duration of all dredging activities, the project proponent shall		
prioritize use of equipment that is maintained and properly tuned		
in accordance with manufacturers' specifications. The project		
proponent shall document and submit evidence to the District's		
Development Services Department prior to commencement of		
waterside construction activities that tugboats, survey vessels,		
and dredgers meeting Tier 3 or better standards are not available		
for use during the duration of all dredging activities. Regardless of		
the equipment used, the project proponent shall verify that all		
equipment has been checked by a mechanic experienced with		
such equipment and determined to be running in proper		
condition prior to admittance into the construction area. The		
project proponent shall submit a report prepared by the		
mechanic experienced with such equipment of the condition of		
the construction and operations vehicles and equipment to the		
District's Development Services Department prior to		
commencement of their use.		
Hazards and Hazardous Materials		
MM-H47-1: Implement a (Landside) Soil and Groundwater	Timing: Prior to and during landside	Implementation: Licensed
Management Program The project proponent shall retain a	construction activities	Professional Geologist,
licensed Professional Geologist Professional Engineering		Professional Engineering
Geologist or Professional Engineer (licensed professional) with	Method: Implement a soil and	Engineer retained by the Project
experience in contaminated site redevelopment and restoration	test handle and dispose of soil and	Proponent and approved by the
to oversee the implementation of a <i>Soil and Groundwater</i>	groundwater properly.	District
Management Program which must be approved by the District	O T T T T T	
The Soil and Groundwater Management Program will be		Monitoring and Reporting:
implemented prior to and throughout the duration of landside		Project Proponent, with approval
construction activities for the proposed project. Each of the		by the District
elements included in the Soil and Groundwater Management		Varification District DWOOD
Program shall include the following elements, each of which have		and County of San Diego DEH
specific timing mechanisms as identified in the description of		and county of San Diego DEII
each element below:		

San Diego Unified Port District

Timing and Methods	Responsible Parties
	Timing and Methods

Mitigation Measures		Timing and Methods	Responsible Parties
	gaps, or (2) historical records do not accurately		
	characterize potential site contamination, new soil		
	and groundwater sampling to characterize the		
	existing vertical and lateral extent and concentration		
	of landside residual contamination must be		
	completed. Any sampling and analysis conducted		
	must be consistent with applicable regulations		
	utilizing the methodologies outlined in ASTM		
	Standard E1903, County of San Diego DEH Site		
	Assessment and Mitigation (SAM) Manual, or some		
	other well-accepted methodology for sampling and		
	analysis leading to site characterization, as approved		
	by the District. The project proponent also shall		
	enroll in the Voluntary Assistance Program (VAP)		
	with the County of San Diego Department of		
	Environmental Health and shall submit the results of		
	the Contamination Characterization Report to DEH		
	staff for regulatory concurrence of results.		
B.	A Soil and Groundwater Testing and Profiling Plan		
	(Testing and Profiling Plan) shall be prepared for		
	those soils and materials that are proposed to be		
	disposed of during construction. The Testing and		
	Profiling Plan shall be prepared after the		
	Contamination Characterization Report and shall		
	utilize the information in the Contamination		
	Characterization Report and include protocols for		
	independent testing of soils and materials identified		
	for disposal for all potential contaminants of concern,		
	including CA Title 22 metals, PAHs, volatile organic		
	compounds, pesticides, PCBs, semi-volatile organic		
	compounds, hydrocarbons, or any other potential		
	contaminants. The Testing and Profiling Plan shall		
Mitigation Measures	Timing and Methods	Responsible Parties	
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document compliance with CA identification and segregation waste as needed for acceptanc compliant offsite disposal faci	A Title 22 for proper a of hazardous and solid ce at a CA Title 22– lity.		
C. A Soil and Groundwater Dispose shall be prepared following the Plan, which shall describe the stockpiling, dewatering, treati hauling of soil and groundwate Disposal Plan shall be prepared the Testing and Profiling Plan applicable regulatory required including CA Title 22 Division CFR Part 263, CAC Title 27, and with applicable regulations fo handling of contaminated mate cross contamination, spills, or segregation into separate pile analysis based on organic vap monitoring. All excavation act monitored for the potential pr soils and for compliance with disposal of contaminated soils required, it shall be done unde County of San Diego Departme Health, which oversees hazard San Diego County	sal Plan (Disposal Plan) ne Testing and Profiling process for excavating, ing, and loading and there from the site. The ed in accordance with and shall adhere to ments and standards, 4.5, and DOT Title 40 and ensure compliance r the disturbance, terials, prevention of releases, such as s for waste profile or, and visual and odor tivities shall be actively resence of contaminated the Disposal Plan. If s or groundwater is er the oversight of the ent of Environmental dous materials issues in		
D. A Site Worker Health and Safe shall be prepared prior to init ensure compliance with 29 CF Waste Operations and Emerge regulations for site workers at	<i>ty Plan (Safety Plan)</i> iation of construction to FR Part 120, Hazardous ency Response t uncontrolled		

Mitigation Measures	Timing and Methods	Responsible Parties
hazardous waste sites. The Safety Plan shall be prepared after, and shall be based on, the Contamination Characterization Report and the planned site construction activity to ensure that site workers potentially exposed to site contamination in soil and groundwater are trained, equipped, and monitored during site activity. The training, equipment, and monitoring activities described in the Safety Plan shall ensure that workers are not exposed to contaminants above personnel exposure limits established by Table Z, 29 CFR Part 1910.1000. The Safety Plan shall be signed by and implemented under the oversight of a California State Certified Industrial Hygienist.		
E. A Site-Specific Community Health and Safety Program (Safety Program) shall be prepared prior to the District Development Services Department's approval of the project's landside working drawings, which addresses the chemical constituents of concern for the project site in order to minimize the exposure of chemical constituents during construction to the surrounding community. The Safety Program shall be prepared in accordance with the County of San Diego DEH's Site Assessment and Mitigation Manual (2009) and EPA's SW-846 Manual (1986). The Safety Program shall include detailed plans on environmental and personal air monitoring, dust control, and other appropriate construction means and methods to minimize the public's exposure to the chemical constituents of concern. The Safety Program shall be reviewed, approved, and monitored for compliance by the District. Following District		

Mitigation Measures	Timing and Methods	Responsible Parties
Environmental Protection Department approval, the project proponent shall implement the Safety Program throughout ground-disturbing construction activities and any other construction activity that may encounter or use chemicals of concern. The contractor shall utilize a Certified Industrial Hygienist with significant experience with chemicals of concern on the project site to actively monitor compliance with the Safety Program and ensure its proper implementation during project construction activities that use substances that may include chemicals of concern.		
F. <i>Monitoring and Reporting Program.</i> During and upon completion of landside construction, the project proponent shall prepare a Monitoring and Reporting Program and submit it to the District's Development Services Department and the RWQCB for review and approval. The Monitoring and Reporting Program shall document implementation of the Soil and Groundwater Management Program. The Monitoring and Reporting Program shall include the project proponent's submittal of monthly reports (during project elements that include active landside disturbance activities, starting with the first ground disturbance activities and ending at the completion of ground disturbance activities of a project element) to the District's Development Services Department, signed and certified by the licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer, as applicable, documenting compliance with the provisions of the Soil and		

Mitigation Me	easures	Timing and Methods	Responsible Parties
Gr	roundwater Management Program and the overall		
So	oil and Groundwater Management Program.		
G. Pr	roject Closeout Report. Within 30 days of completion		
of	landside construction activities the project		
pr	roponent shall prepare a Project Closeout Report		
an	nd submit it to the District's Development Services		
De	epartment for review and approval. The Project		
Cl	oseout Report shall summarize all disturbance,		
de	emolition, and construction activity at the site and		
do	ocument implementation of the Soil and		
Gr	roundwater Management Program. The Project		
Cl	oseout Report would also include the reports and		
Clo	osure documentation associated with the VAP case		
UL	ith the DEH and the closure letter		
vv	tui tue DEII and tue closure letter.		
MM-HAZ-2: Ir	mplement a Dredging Management Program.	Timing: Prior to, during, and upon	Implementation: Project
The project pr	Poponent shall implement a Dredging Management	completion of dredging activities	Proponent
requirements	including the Section 404 permit and the Section	Method: Implement a dredging	Monitoring and Reporting:
401 water qua	ality certification. The DMP shall be implemented	management program that establishes	Project Proponent, with approval
prior to, durin	g, and upon completion of dredging activities for	practices and BMPs to reduce accidental	by the District
the proposed j	project. <u>A clamshell dredger shall be used for all</u>	spill and to prepare a contingency plan in	
project dredgi	ing activities. The DMP shall contain the following	the case of an accident.	Verification: District and RWQCB
elements, each	h of which have specific timing mechanisms as		
A Drodaina (Operations Plan Prior to common company of		
dredging a	activities, the project proponent shall develop a		
Dredging (Operations Plan that identifies the standard		
operating	procedures (SOPs) that will be implemented during		
dredging a	activities. The Dredging Operations Plan shall be		
submitted	to the District's Development Services Department		
for review	and approval prior to commencing dredging		

Mit	igation Measures	Timing and Methods	Responsible Parties
	 activities. The Dredging Operations Plan shall include step-by- step procedures to complete dredging operations safely, in an efficient manner, and to avoid releases of hazardous materials into the environment. The SOPs shall include guidance with respect to, among other things, the following: Proper operation of the dredge bucket; 		
	 Proper positioning of the barge vessel to minimize propeller wash; and 		
	• Placement and maintenance of double silt curtains. In addition, the Dredging Operations Plan shall identify sediment control BMPs to be implemented during dredging activities. The project proponent, or their contractor, shall at a minimum, implement the following BMPs for the safe handling of dredged material:		
	 Sediment Unloading. During dredging activities, the contractor shall reduce water column impacts by controlling the swing radius of the unloading equipment, using a spillage plate, and using a power wash unit to reduce impacts related to spillage from the excavator arm onto transport vehicles. 		
	• Filling Transport Vehicles. During dredging activities, the contractor shall ensure that truck volumes are limited to 90 percent based on visual observations, and that trucks shall be covered and secured per Caltrans regulations during transport to the disposal facility.		
	• Sediment Loading. During dredging activities, the contractor shall ensure that trucks are loaded within a constructed loading zone to confine sediment spilled during the loading process.		
В.	<i>Contingency Plan.</i> Prior to commencement of dredging activities, the project proponent shall develop a Contingency Plan, which shall be implemented in the case of equipment or operational failures, such as, but not limited to, silt curtain damage, spillage of sediment resulting from overloading the material barge, contact with sediment on or around the		

Mitigation Measures	Timing and Methods	Responsible Parties
materials barge during loading, equipment failure of bucket or shear pin during loading procedures, or material barge or tugboat collision with another vessel. The Contingency Plan shall be submitted to the District's Development Services Department for review and approval prior to commencing dredging activities. The Contingency Plan shall contain step- by-step procedures for response to equipment or operationa failures and shall reduce the potential for the release of sediments to the water column.	1	
C. Health and Safety Plan for Dredging Activities. Prior to the commencement of dredging activities, the project proponent shall prepare a Health and Safety Plan for Dredging Activities (Health and Safety Plan) and submit the plan to the District's Environmental Protection Department for review and approval. Following District approval, the project proponent shall implement the Health and Safety Plan for the duration of the dredging activity. The Health and Safety Plan shall be prepared in general accordance with Federal Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120) and Title 8 California Code of Regulations (CCR) Section 5192. The Health and Safety Plan shall provide procedures for workers for safe operation, personal protection, and emergency response during dredging operations.	s of	
 D. Communication Plan. Prior to the initiation of dredging activities, the project proponent or their contractor shall prepare a Communication Plan and operation guidelines for communications between the U.S. Coast Guard and Harbor Police and all vessel operators to ensure the safe movement of project vessels from the dredge site to the unloading area. The Communication Plan shall be submitted to the District's Development Services Department and Harbor Police for review and approval prior to commencing dredging activities After the District's approval, the contractor shall implement 	of ie S.	

Mitigation Measures	Timing and Methods	Responsible Parties
 the Communication Plan throughout the durat activities. E. Sediment Sampling and Remediation. Following completion of dredging, the project proponent the following: 	ion of dredging g the : must adhere to	
 If no in-water construction work that couldisturb sediment is proposed for a dredging specific area that was subject to dredging aproject site), or if proposed in-water constproposed for the dredging area will not co 90 days after the completion of dredging, as sampling and testing shall be conducted to whether contaminated sediments may have by dredging activities. Any sampling shall accordance with Investigative Order No. R (IO), utilizing the methods required by the sediment samples shall be tested for the p COCs identified in the CAO R9-2012-0024. explaining the sampling methodology used containing the results of any sampling shall to the RWQCB for review and approval, an for concurrence. If no subsequent in-water work is proposed within the dredging area proponent must comply with mitigation m HAZ-5. The project proponent must also c mitigation measure MM-HAZ-3 prior to an construction. 	d potentially ng area (a within the truction work mmence within sediment o determine ve been exposed be conducted in 9-2017-0083 e IO. The resence of the . A report d and ll be provided nd to the District r construction a, the project neasure MM - comply with ny in-water	
If in-water construction work that may potentially sediment is proposed for a dredging area and will within 90 days after the completion of dredging, th proponent must implement a Sediment Manageme	r disturb commence ne project ent Program,	

Mitigation Measures	Timing and Methods	Responsible Parties
including sampling, as required by mitigation measure MM-HAZ-		
3 , and must comply with all other mitigation measures.		
MM-HAZ-3: Implement a (Waterside) Sediment Management Program. The project proponent shall retain a licensed Professional Engineer with substantial experience (i.e., more than 5 years) in marine sediment contamination, sediment sampling, and contamination remediation to oversee the implementation of a Sediment Management Program. The Sediment Management Program will be implemented prior to and throughout the duration of waterside construction activities for the proposed project. The Sediment Management Program shall include the following elements, each of which have specific timing mechanisms as identified in the description of each element below:	Timing: Prior to and during waterside construction activities Method: Implement a sediment management program to evaluate potentially contaminated sediment before and after sediment-disturbing waterside activities	Implementation: Licensed Professional Engineer, retained by the Project Proponent and approved by the District Monitoring and Reporting: Project Proponent, with approval by the District Verification: District and RWQCB
A. Sampling Analysis Plan		
B. Marine Sediment Contamination Characterization Report		
C. Contaminated Sediment Management Plan		
D. In-Water Activity Specific Procedures		
E. Post-Construction Sampling and Analysis		
 A. Sampling and Analysis Plan (SAP). Prior to in-water demolition or construction that may potentially disturb sediment, a licensed Professional Engineer shall (1) delineate the area of potential disturbance (Disturbance Area); (2) develop an SAP, which must be consistent with the sampling requirements of IO R9-2017-0083; and (3) perform sediment sampling. The SAP shall set forth the methodology to be used, the locations where sampling would occur, and analysis of the COCs so that it is consistent with the 		

Mitigation Measures	Timing and Methods	Responsible Parties
sampling requirements of IO R9-2017-0083, and		
proper decontamination and disposal procedures.		
The sediment samples shall be tested for the		
presence of the COCs identified in the CAO R9-2012-		
0024. The sampling area and sampling methodology		
shall identify sample locations determined to be		
appropriate, at the discretion of the District and		
RWQCB (or other applicable agencies), to adequately	7	
characterize any Disturbance Area associated with		
project elements. All sediment sampling and analysis	;	
must occur after dredging activity and prior to other		
sediment-disturbing construction activity and shall		
be performed in accordance with the requirements of	f	
the SAP. The SAP must be submitted to the RWQCB		
for review and approval, and to the District for		
concurrence.		
The results of all sediment sampling shall be		
documented in a report and submitted to the RWQCI	3	
for their review and approval prior to any marine-		
side sediment-disturbing activities.		
B. Marine Sediment Contamination Characterization		
Report (Sediment Characterization Report). Prior to		
in-water construction (excluding dredging activities)	,	
the licensed Professional Engineer shall prepare a		
Sediment Characterization Report delineating the		
vertical and lateral extent and concentration of the		
project site's potential COCs in areas where pile		
driving or removal and other sediment-disturbing		
activities are proposed as part of this project. The		
Sediment Characterization Report shall be developed	1	
taking into account the site assessment reports, final		
cleanup reports, and post-remediation monitoring		

Mitigation Measures	Timing and Methods	Responsible Parties
reports associated with the San Diego Shipyard Sediment Cleanup – North Shipyard, and sediment sampling performed per the SAP. The project proponent shall submit the Sediment Characterization Report to the RWQCB (and any other appropriate regulatory agencies) for approval as representative of sediment conditions in Disturbance Areas.		
C. Contaminated Sediment Management Plan (Sediment Management Plan). If contaminated sediment is identified in the Sediment Characterization Report in any of the proposed project Disturbance Area, the project proponent shall prepare a Sediment Management Plan for the District's and RWQCB's approval. Once approved, the Sediment Management Plan shall be implemented by the project proponent and be subject to oversight by the appropriate overseeing regulatory agencies, including the District The Sediment Management Plan shall describe in detail the methods to be employed to prevent waterside construction activity from adversely affecting or exposing the gravelly-sand or sand- covered contaminated sediment, or disturbing contaminated sediment, as identified in the Sediment Characterization Report, and the monitoring that wi occur postconstruction.	r n t t t t	
D. In-Water Activity–Specific Procedures (Pile Installation or Removal). Pile installation or removal shall be conducted in a manner that implements applicable permit requirements, including the CWA Section 404 permit and CWA Section 401 Water Quality Certification. The following measures are required	on 4	

Mitigation Mea	isures	Timing and Methods	Responsible Parties
ba	sed on the type of pile installation, or removal, that		
000	curs.		
1.	Impact Hammer Pile Driving.		
OR			
2.	Internal Jetting.		
	A. Internal jetting shall not be allowed unless the project proponent can demonstrate, to the District's satisfaction, there are no feasible alternatives to the use of internal jetting.		
	 B. Turbidity curtains shall be installed in compliance with the District's Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District (District 2019). 		
OF	1		
3.	Spudding . Spudding shall not be allowed unless the project proponent can demonstrate, to the District's satisfaction, there are no feasible alternatives to the use of spudding. If no alternatives to spudding are feasible, when spuds are lifted during in-water construction, they shall be lifted slowly—at least a quarter of the speed that spuds are lifted during normal operation. Before the spud reaches the subsurface of the Bay floor during removal, the operator shall conduct spud extraction in 2-minute intervals (repeated		
	spud extraction in 2-minute intervals (repeated		

Mitigation Measures	Timing and Methods	Responsible Parties
2-minute extraction followed by 2-minute pause)		
to reduce the disturbance of Bay sediment.		
 E. Post-Construction Sampling and Analysis. At the conclusion of construction activities within a Disturbance Area, the project proponent shall conduct post-construction sediment sampling that adequately characterizes potential contamination resulting from construction activities (and dredging activities if the in-water construction occurred within a dredging area) to determine if in-water construction or disturbance activities resulted in COCs in excess of the levels above the levels set forth in CAO R9-2012-0024. All sampling shall be conducted in accordance with IO No. R9-2017-0083, utilizing the methods required by the IO. The project proponent shall prepare, for submittal to and approval by the District and RWQCB, a Post-Construction Sampling Plan that shall outline the 		
methodology to be used, the locations where sampling would occur, and the COCs to be analyzed		
consistent with CAO R9-2012-0024.		
MM-HAZ-4: Comply with Federal and State Permits. Prior to in water construction, the project proponent shall obtain all federal and state permits required for in-water construction activities,	Timing: Prior to and during in-water construction	Implementation: Project Proponent
provide evidence of such permits to the District, and demonstrate to the District compliance with all permit conditions during in- water construction.	Method: Obtain and comply with federal and state permits required for in-water construction activities	Monitoring and Reporting: Project Proponent
		Verification: District
MM-HAZ-5: Implement Post-Dredging and/or Post-Waterside Construction Remediation. If, after the completion of any	Timing: Post-dredging and/or post- waterside construction	Implementation: Project Proponent
dredging activity for a dredging area or in-water construction work, consistent with the requirements of mitigation measures MM-HAZ-2 and MM-HAZ-3 , site sampling shows that	Method: If post-dredge or post-waterside construction site sampling results are over the threshold, the project proponent will	Monitoring and Reporting: Project Proponent
concentrations of COCs exceed those set forth in CAO R9-2012-	implement remediation activities.	Verification: District and RWQCB

Mitigation Measures	Timing and Methods	Responsible Parties
0024 (or other levels as prescribed by the RWQCB), the project		
proponent shall propose remediation consistent with CAO R9-		
2012-0024 (or other levels as prescribed by the RWQCB), subject		
to approval by the RWQCB, and any other agencies with		
jurisdiction over the site contamination, and concurrence by the		
District. The project proponent's remediation approaches may		
include, but are not limited to, additional dredging, placement of		
sand cover, or Enhanced Monitored Natural Recovery sand		
containing active carbon. If remediation is required, the		
remediation shall be conducted with oversight from the		
appropriate local, state, or federal regulatory agency. In addition,		
documentation evidencing the remediation work and completion		
thereof shall be submitted to the District. The project proponent		
shall monitor the remediation for its effectiveness, consistent		
with the standards set forth by CAO R9-2012-0024 (or other		
levels as prescribed by the RWQCB), for a period consistent with		
guidance from the regulatory agency with jurisdiction. A		
monitoring report shall be submitted to the District and the		
RWQCB for their review on a monthly basis, or at a frequency		
determined appropriate by the relevant agency overseeing the		
remediation activities.		
If, after the completion of any dredging activity for a dredging area or		
in-water construction work within a Disturbance Area, consistent		
with the requirements of mitigation measures MM-HAZ-2 and MM-		
HAZ-3 , concentrations of LULs in the area of potential contamination do not exceed these levels set forth in CAO P9 2012 0024 (or other		
levels as prescribed by the RWOCB) no further mitigation is		
required.		
Hydrology and Water Quality		
MM-HWQ-1: Remove and Dispose of Creosote Piles Properly.	Timing: During in-water construction	Implementation: Project
During pile extraction, if piles cannot be completely removed, they		Proponent, General Contractor

shall be cut at least 1 foot below the mud line. If treated piles are fully extracted or if they are cut below the mudline, the project proponent or contractor shall cap the holes or piles with appropriate material

Method: Implement measures to protect workers and the environment during removal of creosote-treated piles

Monitoring and Reporting: **Project Proponent**

Mitigation Measures	Timing and Methods	Responsible Parties
such as clean substrate (sand and/or gravel) or pile caps. Removed		
creosote-treated piles shall be disposed of in a manner that		Verification: District
precludes their further use. The piles must be cut into manageable		
lengths (4-foot lengths are preferable) for transport and disposal in		
an approved upland location. Extracted piles and debris should be		
placed in a lined stockpile area or directly loaded into transport		
container or vehicle. Appropriate controls should be used to prevent		
runoff from leaving the stockpile and entering surface water or		
ground water.		