FINAL

ENVIRONMENTAL IMPACT REPORT
STATE CLEARINGHOUSE NO. 2012031024

BAE SYSTEMS PIER 4 REPLACEMENT PROJECT

SAN DIEGO UNIFIED PORT DISTRICT

SAN DIEGO COUNTY, CALIFORNIA

LSA

August 1, 2012

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F I N A L

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SAN DIEGO UNIFIED PORT DISTRICT
SAN DIEGO COUNTY, CALIFORNIA

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August 1, 2012

The San Diego Unified Port District has independently reviewed, analyzed, and exercised its judgment in the analysis contained in this Environmental Impact Report and supporting documentation pursuant to Section 21082 of the California Environmental Quality Act.

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Table of Contents

Volume 1: Final EIR

Section 1.0: Introduction 1-1

Section 2.0: Executive Summary 2-1

2.1 Introduction 2-1

2.2 Proposed Project 2-2

2.3 Areas of Controversy 2-2

2.4 Alternatives to the Proposed Project 2-2

2.5 Issues to Be Resolved 2-4

2.6 Impacts, Mitigation, and Level of Impact Summary Table 2-4

Section 3.0: Errata and Revisions 3-1

Section 4.0: Public Review Distribution List 4-1

Section 5.0: Response to Comments 5-1

5.1 List of Persons, Organizations, and Public Agencies Commenting on the DEIR 5-2

5.2 Format of Responses to Comments 5-2

5.3 Letter A: California Native American Heritage Commission 5-3

5.4 Letter B: Department of Toxic Substances Control 5-15

5.5 Letter C: California State Lands Commission 5-27

5.6 Letter D: San Diego Coastkeeper 5-39

5.7 Letter E: United States Fish and Wildlife Service 5-61

Section 6.0: Mitigation Monitoring Reporting Plan 6-1

Volume 2: Draft EIR

Volume 3: Draft EIR Technical Appendices

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Section 1.0

Introduction

This document is a Final Environmental Impact Report (EIR), which provides a review and analysis of the potential environmental impacts that could result from implementation of the proposed BAE Systems Pier 4 Replacement Project (proposed project). In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15002(f), an EIR "is the public document used by the governmental agency to analyze the significant environmental effects of a proposed project, to identify the alternatives, and to disclose possible ways to reduce or avoid the possible environmental damage." The EIR itself does not control the way in which a project can be developed or constructed; rather, the governmental agency must respond to the information contained in the EIR by one of more of the seven methods outlined in Section 15002(h), which include:

- Changing a proposed project;
- Imposing conditions on the approval of the project;
- Adopting plans or ordinances to control a broader class of projects to avoid the adverse changes;
- Choosing an alternative way to meet the same need;
- Disapproving the project;
- Finding that changing or altering the project is not feasible;
- Finding that the unavoidable significant environmental damage is acceptable as provided in Section 15093.

The Final EIR is an informational document only. The Final EIR will be used by the Board of Port Commissioners, San Diego Unified Port District (Port District) staff, and decision-makers of other affected agencies or responsible agencies as an informational document for the proposed project. The Final EIR will be considered by the following agencies and jurisdictions when making their respective decisions pertinent to the proposed project:

- District: (1) Certification of the Final EIR, (2) approval of the proposed BAE Systems Pier 4 Replacement Project, and (3) issuance of Coastal Development Permit.
- United States Army Corps of Engineers: (1) Individual/Nationwide Section 404 Permit (CWA, 33 USC 1341), (2) Section 10, Rivers and Harbors Act Permit, (3) Marine Protection, Research, and Sanctuaries Act of 1972, Section 103, and (4) 40 CFR, Part 227 – Criteria for the Evaluation of Permit Applications for Ocean Dumping of Materials.
- United States Environmental Protection Agency: Ocean Dumping Permit.
- United States Coast Guard: Concurrence with Ocean Dumping Permit.
- National Marine Fisheries Service and United States Fish and Wildlife Service: Concurrence with Ocean Dumping Permit.

- California Coastal Commission (Coastal Commission): Coastal Development Permit.
- California State Lands Commission (SLC): Amendment to Lease (PRC § 8054.1).
- California Department of Fish and Game: Concurrence with Ocean Dumping Permit.
- Regional Water Quality Control Board: (1) 401 Certification (CWA, 33 USC 1341, if the project requires USACE 404 Permit), and (2) Water Discharge Requirements (WDRs) for dredging.
- City of San Diego: Building permits.

Other agencies may use the information contained in this Final EIR when considering issuance or authorization of the requisite permits for construction of the proposed project. The Final EIR, in compliance with Section 15132 of the *CEQA Guidelines*, includes the following three volumes, all of which are included on the enclosed CD:

Volume 1: Final EIR

Chapter 1 – Introduction. This chapter provides background on, and the procedural compliance of, the proposed project and the Final EIR.

Chapter 2 – Executive Summary. This summary includes a brief project description; a brief summary of significant impacts and mitigation measures; a brief summary of project alternatives; and issues to be resolved by Board of Port Commissioners.

Chapter 3 – Errata and Revisions. This chapter includes the errata and revisions to the Draft EIR, which were developed in response to comments received during and after the public review period for the Draft EIR.

Chapter 4 – Public Review Distribution List. This chapter presents a list of agencies, individuals, and organizations that were provided a copy of the Draft EIR or notice of the document's availability.

Chapter 5 – Responses to Comments. This chapter includes a list of those that provided comments on the Draft EIR during and after the public review period. This chapter also includes the comments received on environmental issues raised during the public review process for the Draft EIR as well as the Port District's responses to these comments. Each comment is assigned a comment number, which corresponds to a response number and response that appear on the same page. Supplemental information that was used in development of the responses is attached to the end of the chapter.

Chapter 6 – Mitigation Monitoring and Reporting Program. This chapter of the Final EIR provides the Mitigation Monitoring and Reporting Program (MMRP) for the BAE Systems Pier 4 Replacement Project. 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.

Volume 2: Draft EIR

The Draft EIR that was previously circulated for public review is an integral part of the Final EIR. The Draft EIR was not reprinted due to its size; however, a CD copy of the Draft EIR, including its one volume of appendices, is enclosed within this Final EIR. A paper copy of the Draft EIR, including its appendices, is available at the Port District's Clerk office located at 3165 Pacific

Highway, San Diego, during regular business hours, which are Monday through Friday, 8 a.m. to 5 p.m.

Volume 3: Draft EIR Technical Appendices

The appendices to the Draft EIR that were previously circulated for public review are an integral part of the Final EIR.

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Section 2.0

Executive Summary

2.1 INTRODUCTION

This Environmental Impact Report (EIR) (State Clearinghouse No. 2012031024) for the BAE Systems Pier 4 Replacement Project (proposed project) has been prepared by LSA Associates, Inc. (LSA) on behalf of the San Diego Unified Port District (District) to 1) identify the impacts of the proposed project on the environment, 2) discuss alternatives to the proposed project, and 3) propose mitigation measures that will offset, minimize or otherwise avoid significant environmental impacts. The EIR has been prepared in accordance with the California Environmental Quality Act[1] (CEQA) and the *Guidelines for California Environmental Quality Act* (*CEQA Guidelines*),[2] both of which regulate the preparation of EIRs.

Based on the potential impacts of the proposed project, including cumulative impacts, and the comments received during the public review of the Notice of Preparation (NOP), the District determined that an EIR should be prepared to analyze potential impacts of the proposed project with respect to the following environmental issues:

- Air Quality;
- Biological Resources;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Transportation and Traffic; and
- Utilities and Service Systems.

These ten environmental issues are individually addressed in Section 4.0 of the Draft EIR (Environmental Impact Evaluation). In addition to a discussion of the significant effects that would result from the construction and operation of the proposed project, Section 4.0 of the Draft EIR includes recommended mitigation measures that have been identified to reduce or avoid such effects.

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1 *California Environmental Quality Act*, as amended in 2007, §§21000–21189.3, Public Resources Code, State of California.

2 *Guidelines for Implementation of the California Environmental Quality Act*, as amended January 1, 2012. §§15000-15387, California Code of Regulations, Title 14, Chapter 3, State of California.

2.2 PROPOSED PROJECT

The goal of the Pier 4 Replacement Project is to replace an existing, 52-year-old pier with a newer, more modern pier that will allow BAE Systems to maintain and repair the current fleet of military and commercial ships, including the littoral combat ship (LCS), the first of a new class of surface combat ships for the U.S. Navy.

The proposed project is generally located within a private shipyard (BAE Systems facility) located along the eastern shoreline of central San Diego Bay at 2205 East Belt Street in the City of San Diego, California. See Figure 3.1 in the Draft EIR for the regional location of the project site and Figure 3.2 for an aerial photograph of the project site.

The proposed project proposes landside and waterside redevelopment of the Pier 4 site within the existing BAE Systems facility located in the Port of San Diego. The proposed landside improvements include: removal of existing revetments along the shoreline, relocation of shoreline infrastructure (e.g., existing waterfront storm water collection tanks), and the construction of three new bulkhead sections. The proposed waterside improvements include the demolition of the existing Pier 4 and Pier 5 structures at the BAE Systems facility, removal of the five drydock mooring dolphins, underwater dredging, and the construction of a replacement pier and a mooring dolphin.

The project would remove approximately 20,269 square feet (sf) of marine structures (piers and dolphins) and would result in approximately 26,944 sf of new marine features. The project would also result in the dredging of approximately 41,908 cubic yards (cy) of bay sediment in three phases. Phase A would include the dredging of 28,700 cy of bay sediment of which 27,500 cy (Sub-Phase A1) have been approved for ocean disposal and 1,200 cy (Sub-Phase A2) have been evaluated for upland disposal. Phase B would include the dredging of 8,958 cy of bay sediment of which 6,952 cy (Sub-Phase B1) would be evaluated for ocean disposal and 2,006 cy (Sub-Phase B2) would be evaluated for upland landfill disposal. Preliminary testing for Sub-Phase B-1 indicates that upland disposal will likely be the appropriate course of action. Phase C would include the dredging of 4,250 cy of bay sediment that would be evaluated for upland landfill disposal. Sub-Phase B2 and Phase C are also within the Cleanup and Abatement Order (CAO) R9-2012-0024 remedial footprint. These two sub-phases total approximately 0.70 acre.

2.3 AREAS OF CONTROVERSY

CEQA Guidelines Section 15123(b)(2) requires that areas of controversy known to the Lead Agency (District) be stated in the EIR summary. There were no representatives of public agencies or members of the public in attendance at the public scoping meeting. Although requests have been made by certain agencies for a copy of the EIR, no areas of controversy have been brought up during the NOP comment period. During the Draft EIR public comment process, concerns over water quality, dredging procedures, biological resources, greenhouse gases, air quality, and hazardous materials were raised through comment letters received. These concerns have been addressed through Section 5.0 Response to Comments of this document.

2.4 ALTERNATIVES TO THE PROPOSED PROJECT

CEQA (§15123[b][3]) requires that an EIR contain a summary of the project alternatives. The EIR is required to identify alternatives that were considered by the Lead Agency but were

rejected as infeasible. Factors to be considered when addressing the feasibility of alternatives may include failure to achieve most of the project objectives, inability to avoid significant environmental impacts, incompatibility with adjacent uses, and/or inconsistency with local planning policies. An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. The range of alternatives required in an EIR is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the proposed project and would avoid or substantially lessen any of the significant effects of the proposed project. Pursuant to CEQA, "feasible" has been defined as "…capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."[1]

Three alternatives have been identified for analysis in this EIR. Summaries of each alternative have been provided below. More detailed descriptions of each project alternative are provided in Section 7.0 of the Draft EIR.

2.4.1 Alternatives Carried Forward for Analysis

The following three alternatives are summarized here and analyzed in greater detail in Section 7.0 of the Draft EIR.

- Alternative 1: No Project/No Development Alternative;
- Alternative 2: Pier Rehabilitation Alternative; and
- Alternative 3: Reduced Project Alternative.

2.4.1.1 Alternative 1: No Project/No Development Alternative

The No Project/No Development Alternative would result in a continuation of existing conditions within the existing shipyard repair facility. Impacts associated with this alternative, when compared to the proposed project, would not occur. In the absence of project implementation, no impacts would occur and this alternative would be the environmentally superior alternative. However, the No Project Alternative would not fulfill any of the objectives of the proposed project. Where the No Project alternative is the environmentally superior alternative, CEQA Guidelines section 15126.6(e)(2) requires the EIR also to identify the environmentally superior alternative among the other alternatives.

2.4.1.2 Alternative 2: Pier Rehabilitation Alternative

Implementation of this alternative includes the rehabilitation of the existing Pier 4 for continued limited service for vessels that can be accommodated given the existing size, configuration, and infrastructure at the existing Pier 4. This alternative would result in the rehabilitation of the end of the existing pier, bulkhead repair, removal of existing mooring dolphins, and installation of new mooring dolphin. Under this alternative, the Pier 5 stub would remain in place and no

[1] Guidelines for California Environmental Quality Act, §15364.

dredging would occur. Alternative 2, the Pier Rehabilitation Alternative would have reduced construction impacts compared to the proposed project, avoid the bay coverage impact, and avoid all of the operational impacts identified for the proposed project. Therefore, Alterative 2 is the environmentally superior alternative among the other alternatives considered.

2.4.1.3 Alternative 3: Reduced Project Alternative

The Reduced Project Alternative would be a realigned replacement Pier 4 that is narrower overall than the proposed project. With the exception of the removal of Pier 5, all other components of the proposed project would be included (e.g., Pier 4 replacement, bulkhead removal/replacement, installation of mooring dolphin, and dredging activities) under this alternative.

2.5 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the *CEQA Guidelines* requires that an EIR identify issues to be resolved; this includes the choice among the alternatives and whether or how to mitigate significant impacts. The major issues to be resolved for the proposed project include decisions by the District as to whether:

- This EIR adequately describes the potential environmental impacts of the proposed project;
- The recommended mitigation measures should be adopted or modified;
- Additional mitigation measures need to applied;
- The proposed project should or should not be approved as proposed; and
- The District should adopt one of the alternatives considered in this EIR rather than approving the proposed project.

2.6 IMPACTS, MITIGATION, AND LEVEL OF IMPACT SUMMARY TABLE

Table 2.A summarizes the significant environmental impacts of the proposed project, the mitigation measures recommended to reduce or avoid the significant impacts, and concludes whether the mitigation measures reduce the impacts below significance. This table also serves as a tool designed to track mitigation measures identified in the EIR. The mitigation measures will be incorporated into the proposed project's Mitigation Monitoring Reporting Plan (MMRP) included as Section 6.0 of the Final EIR.

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
4.1 AIR QUALITY		
Air Quality Management Plan Consistency/Regional Air Quality Strategy: The proposed project is the replacement and improvement of facilities within an existing shipyard repair facility and is consistent with the PMP land use designation. The proposed project does not require a PMP amendment, involves no change of land use, and is a replacement of an existing facility. Therefore, the proposed project is considered to be within the SANDAG growth projections and consistent with the PMP land use designation, the RAQS and SIP. The proposed project would not result in significant construction or operational air quality impacts. Therefore, the proposed project would not substantially contribute to an increase the frequency or severity of existing air quality violations, contribute to new violations, or delay the timely attainment of air quality standards or interim reductions as specified in the RAQS. Impacts are less than significant and no mitigation is required.	No Mitigation Required	Less Than Significant
Long-Term Microscale (CO HotSpot) Impacts/Localized CO Impacts at Nearby Intersections: The proposed project will contribute an incremental amount of traffic to local intersections, roadway segments, and freeways during the peak morning and afternoon periods. However, the area around the project site has low existing CO concentrations (3.1 ppm and 2.6 ppm for 1-hour and 8-hour measuring periods, respectively) and has not been above the State or Federal standards within the past three years. BAE Systems requires that pier-related employees arrive prior to 7:00 a.m. and leave prior to 4:00 p.m., outside of the normal peak hour periods. Therefore, the proposed project would not contribute to rush hour traffic. Therefore, no significant CO contributions would result from the project in the project vicinity. A less than significant impact would occur and no mitigation	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
measures would be required.		
Sensitive Receptors – Non-Carcinogenic Acute Project-Related Emission Impacts: Construction activities are sporadic, transitory, and short-term in nature; and once construction activities have ceased, so too would emissions from construction activities. Because the duration of exposure to diesel exhaust during the temporary construction activity would be much shorter than the assumed 70-year exposure period used to estimate lifetime cancer risks, construction of the proposed project is not anticipated to result in an elevated health risk to exposed persons. Impacts are less than significant. The operations expected to occur at these facilities will not emit any toxic chemicals in any significant quantity other than diesel exhaust. The proposed Pier 4 replacement will not introduce new toxic substances, or substantially increase the quantities of existing substances used at the existing facility. Since there are no significant emissions of toxic air pollutants that cause short-term acute health effects in the project vicinity, the potential for short-term acute exposure will be less than significant.	No Mitigation Required	Less Than Significant
Sensitive Receptors – Carcinogenic and Chronic Project-Related Emission Impacts: Implementation of the proposed project would require the use of heavy construction equipment and diesel truck trips hauling demolition and dredged material. Construction emissions would be temporary and would not result in a long-term increase in exposure to TAC emissions. The truck trips associated with the project would not substantially increase cancer, or chronic health risks because of the relatively small number of daily truck trips and the small number of total trips. In addition, typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes, automotive repair facilities, and dry cleaning facilities. Because the proposed project would not introduce	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
these uses to the site, or substantially increase the number of operational diesel truck trips to the site, potential project-generated air toxic impacts on surrounding land uses and sensitive receptors would be less than significant. The operation of the pier replacement would not require a substantial increase in the number of diesel truck trips compared to existing conditions. Furthermore, there are no sensitive receptors located in the project vicinity. Therefore, the operation of the proposed project does not represent a health risk with respect to diesel particulate matter.		
Objectionable Odors: The proposed project would generate temporary, localized odors during construction activities, similar to any other construction project. However, odor impacts would be temporary and limited to the area adjacent to the construction site, which is a marine-industrial use. In addition, SDAPCD-recommended practices regarding equipment will be adhered to. Therefore, impacts would be less than significant. Solid waste generated by the proposed on-site uses will be collected by a contracted waste hauler, ensuring that any odors resulting from on-site uses would be adequately managed. Due to the distance of the project site from sensitive receptors and because solid waste from the project will be managed and collected in a manner to prevent the proliferation of odors, no significant odor impact will occur. Further, operation of the proposed project would create motor vehicle trips that would generate tailpipe emissions. However, odor impacts would be limited to the circulation routes and parking areas. Such brief exhaust odors are an adverse, but not significant, air quality impact. Therefore, odor impacts would be less than significant.	No Mitigation Required	Less Than Significant
Emissions Increase and Air Quality Standard Violation:	No Mitigation Required	Less Than

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the project site. Because proposed project construction emissions would not exceed applicable thresholds and the construction contractor would be required to implement standard Rule 55 BACMs, construction impacts on air quality would be less than significant. Operational air pollutant emission impacts are those associated with stationary sources and mobile sources resulting from operation of the proposed project. Project emissions (both stationary sources and vehicular sources) would not exceed the daily emissions thresholds. Therefore, the operational air quality impacts of the proposed project are less than significant.		Significant
4.2 BIOLOGICAL RESOURCES		
Special Status Species: There were no sensitive species observed within the project site during the field survey. The project site is an existing industrial shipyard operation, and does not feature unique or rare habitats whose alteration would significantly affect sensitive species in the area. However, there is the potential for special-status species to be subject to impacts due to disruption from noise and turbidity during construction activity. These may include the California Brown Pelican, Double-crested Cormorant, California Least Tern, Green Sea Turtle, Harbor Seal, and California Sea Lion. This is a potentially significant impact requiring mitigation.	**BIO-1 Biological Monitoring For Special-Status Species.** During impact hammer pile driving project activities, the project applicant shall retain a qualified biologist to monitor project activities in accordance with the mitigation measures below. The Biological Monitor shall be authorized to temporarily halt or redirect work. The Biological Monitor shall keep logs recording site activities, species observed and their behavior during construction activities, and, if needed, actions taken to avoid impacts to species. These logs shall be maintained by BAE Systems. In the event that the Biological Monitor suspects that work being conducted would have significant adverse effects to special status species (e.g. marine mammals or turtles), he/she shall immediately notify the contractor and BAE Systems and impose corrective measures. If the situation is not remedied immediately, the monitor shall notify the permitting agencies.	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	BIO-2 Biological Monitoring of Impact Hammer Pile Driving. During construction, the project applicant shall retain a qualified Biological Monitor to conduct monitoring within 500 feet of any active impact hammer pile driving. The contractor shall not start work if any observations of turtles or marine mammals are made prior to starting impact hammer pile driving. The applicant shall ensure that work will not re-commence until the turtle(s) or marine mammal(s) have left the area, or ten minutes have passed. **BIO-3 Pile Driving.** When performing impact pile driving, the contractor shall commence work with one blow followed by a 1-minute period of no pile driving, prior to commencing full pile driving activities. The purpose of this activity is to encourage turtles and marine mammals in the area to leave the project site prior to commencement of work. A qualified Biological Monitor shall commence monitoring prior to initial pile driving as described above to determine if turtles or marine mammals are in the area. This process shall be repeated if pile driving ceases for a period of greater than an hour. **BIO-4 Vessel Speed.** The project applicant will ensure that construction vessel traffic shall adhere to the existing no wake zone requirements for the shipyard and not exceed a maximum speed of 5 knots (5.75 miles per hour) within 500 feet of any BAE Systems seawall, pier, or mooring dolphin. **BIO-5 Turbidity Curtain.** Regardless of the timing of dredging for dredging areas A-2, B-1, B-2, and C, the project applicant shall deploy a silt curtain around the dredging areas to restrict the surface visible turbidity plume to the area of construction and dredging. It shall consist of a	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	hanging weighted curtain with a surface float line and shall extend from the surface to 20 feet down into the water column. The turbidity curtain shall be kept a minimum of 30 feet away from staked eelgrass beds in order to prevent damage to eelgrass beds from curtain drag or movement. The goal of this measure is to minimize the area of the Bay in which visibility of prey by terns is obstructed. The applicant shall ensure that this measure is implemented for the duration of dredge activity. **BIO-6 Biological Monitoring During Breeding Season.** Should impact hammer pile driving activities be conducted during the breeding season, a qualified Biological Monitor shall be retained by the project applicant at its expense to conduct monitoring within 500 feet of construction activities, and a silt curtain installed during breeding season. The monitor shall be empowered to delay commencing work, and shall do so if terns are actively foraging (e.g., searching and diving) within the work area. Should adverse impacts to terns occur (e.g., agitation or startling during foraging activities), the Biological Monitor shall be empowered to delay or halt construction, and shall do so until California least terns have left the project site. **BIO-7 Bay Coverage.** Prior to construction activities that would trigger off-site mitigation, the Project Applicant shall identify a mitigation site in San Diego Bay to meet a 1:1 mitigation ratio for approximately 7,969 square feet of bay coverage impacts. Mitigation may comprise of development of a fish enhancement structure in the form of a rock/rubble reef. However, other acceptable forms of mitigation include: • Removal of similar structures within the bay (e.g., dock	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	removal); • Removal of upland fill from the bay; • Creation of eelgrass habitat and/or reef structures in presently unvegetated bottom areas; • Purchase of credits from a mitigation bank (for fill removal or enhancement such as eelgrass); • Removal of non-functional riprap or debris from intertidal or shallow subtidal habitat in the bay to improve suitability for use by birds and fish; and • Shallow-up deep, subtidal habitat to shallow, subtidal habitat to create more preferred foraging habitat. **BIO-8 Completion Report for Project Mitigation.** Within 30 days of project completion, but prior to any authorized use of the replacement pier, BAE Systems Environmental Manager or designee shall submit to the Port District and all affected resource and permitting agencies, a Completion Report detailing the completion and compliance with all mitigation measures contained in the proposed project's Mitigation Monitoring and Reporting Program (MMRP), including Mitigation Measures BIO-1 through BIO-14. The Completion Report shall contain all logs and related documentation as required by each mitigation measure identified in the project's MMRP. **BIO-13 Marine Mammal and Turtle Contingency Plan.** Prior to the initiation of impact hammer pile driving activities,	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	the project applicant shall retain a qualified biologist to prepare a Marine Mammal and Turtle Contingency Plan (Contingency Plan) to identify the actions taken in the event that, in spite of the requirement to stop work if a marine mammal or sea turtle is present in the vicinity of the construction activity, a marine mammal or sea turtle is injured. The Contingency Plan shall be submitted to the Port and National Marine Fisheries Services (NMFS) or other appropriate resource agency for review and approval and shall include but not be limited to notification "trees," identification of rescue centers, information for key contacts, and plans of action. The applicant shall ensure that this measure is implemented for the duration of impact hammer pile driving activity.	
Riparian Habitat or Other Sensitive Natural Communities: There is no riparian habitat in the project area. Sensitive natural communities considered for this analysis include vegetated and unvegetated soft bottom communities, riprap revetment habitat, pier pilings, open water habitat, and eelgrass habitat. Dredging would result in the removal of all existing flora and fauna from the dredged area. The installation of pier piles would result in a small decrease in subtidal unvegetated habitat (approximately 400 sf). The small reduction in subtidal unvegetated habitat would also be offset by the substantial increase in pile surface area. As a result, the impact of pile installation on the soft bottom benthic community is not considered to be significant. There is potential risk of unanticipated/unintended eelgrass damage during construction either through increased turbidity associated with the construction work or from accidental damage by equipment grounding or through vessel	**BIO-9 Eelgrass Boundaries.** Prior to construction, the boundaries of the eelgrass beds, located along the north/west and east/west bulkheads within the BAE Systems facility, shall be staked with ridged PVC markers or self-centering buoys visible at all tide heights. The project applicant shall protect, replace, and maintain the markers/buoys as needed to ensure that they remain in place and properly stake the boundaries of the eelgrass beds. **BIO-10 Eelgrass Silt Curtain.** During shoreline work, the project applicant will protect eelgrass with silt curtains deployed above the eelgrass and below the shoreline work area. The silt curtain will be designed to prevent drift, so that impacts to eelgrass during installation are avoided. **BIO-11 Eelgrass Surveys.** The project applicant shall conduct a pre-construction eelgrass survey in accordance with the requirements of the Southern California Eelgrass	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
maneuvering. This is a potentially significant impact requiring mitigation. Although not currently known to occur within San Diego Bay or the project site, the green alga *Caulerpa taxifolia* is an invasive species of concern in the region. This species and lesser invasive species may be spread inadvertently by construction activity associated with the waterside improvements. The inadvertent spread of invasive marine species that are not presently found ubiquitously throughout the region, particularly *C. taxifolia*, would be a potentially significant impact, requiring mitigation.	Mitigation Policy (SCEMP). A pre-construction eelgrass survey shall be completed by a qualified biologist within 60 days prior to initiation of demolition or construction activities at the site. This survey shall include both aerial and density characterization of the beds. A post-construction survey shall be performed by a qualified biologist within 30 days following project completion to quantify any unanticipated losses to eelgrass habitat. Impacts shall then be determined from a comparison of pre- and post-construction survey results. Impacts to eelgrass, if any, would be mitigated through conformance with the SCEMP, which defines the mitigation ratio and other requirements to achieve mitigation for significant eelgrass impacts. If required following the post-construction survey, the SCEMP defined mitigation shall be developed, approved by the U.S. Army Corps of Engineers (USACE) and National Marine Fisheries Service (NMFS), and implemented to offset losses to eelgrass. **BIO-12 *Caulerpa*.** BAE Systems shall conduct a surveillance-level survey for *Caulerpa taxifolia* not more that 90 days before the initiation of construction to determine presence/absence of this species within the immediate vicinity of the project. If *Caulerpa taxifolia* is identified during a survey, or at any other time before, during, or within 120 days following completion of authorized activities, both NMFS and CDFG shall be contacted within 24 hours of first noting the occurrence. In the event *Caulerpa* is detected, all disturbing activity shall cease until such time as the infestation has been isolated and treated, or the risk of spread from the disturbing activity is eliminated in	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	accordance with the CCP. Refer to **BIO-8 (Completion Report for Project Mitigation)**. **BIO-14 Cleanup Abatement Order MMRP Compliance.** The project applicant shall ensure that construction activities within the scope of Shipyard Sediment Site Cleanup and Abatement Order (R-9-2012-0024) comply with all relevant Mitigation Monitoring and Reporting Program components of the Regional Water Quality Control Board's EIR.	
Federally Protected Wetlands: Federally protected wetlands as defined by Section 404 of the Clean Water Act are not found within the project site. Therefore, construction and operation of the proposed project will have no impact to federally protected wetlands. No mitigation measures are required.	No Mitigation Required	Less Than Significant
Movement of Fish or Wildlife Species: Native wildlife nursery sites and movement corridors do not occur within the project site and no impediment to nursery sites or wildlife movement would occur with project construction. As a result, no significant impacts on wildlife corridors would occur with implementation of the land-side portion of the proposed project. During the installation of pilings and repositioning of the docks, fish movement through the project area could be temporarily affected, and some species would vacate the area during disturbance. However, these impacts are temporary and would not substantially alter or interfere with the permanent movement through the project area of any native resident or migratory fish. The proposed temporary construction would not affect the timing of any potential turtle migration or impede the movement of any migrating turtles because migrating individuals would more likely be occupying the deeper water channels and other	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
open water areas offshore. Operation of the facility would have no effect on the migratory patterns of local green sea turtles or marine mammals because presumably turtles and marine mammals would be vacating the San Diego waters via deeper channels and open water areas, and their presence within the project area would be unlikely. As explained above, the proposed project would not substantially increase boat traffic, impacts of the project operations on turtle and marine mammal migration and movement of fish species would be considered less than significant.		
Local Policies and Ordinances: The proposed project is located in a marine industrial area of the Bay and is consistent with the PMP. The local ordinance or policy that pertains to biological resources applicable to the proposed project is the PMP. In addition, and as part of the mitigation to address bay coverage impacts, the project applicant is committed to working with the District on the creation of additional artificial reef /fish enhancement structures in the Bay to improve the overall biological resource value of the Bay. Therefore, the proposed project is consistent with the PMP policy pertaining to biological resource. The proposed project results in a less than significant impact to local policies and ordinances intended to protect biological resources. Therefore, no mitigation measures are required.	No Mitigation Required	Less Than Significant
Provisions of a Habitat Conservation Plan: No adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State HCP is in place that includes the project site or surrounding properties. However, the San Diego Bay Integrated Natural Resources Management Plan (INRMP) is a relevant plan that applies to the project area. The proposed project includes compliance with all regulatory	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
requirements and mitigation measures that minimize adverse effects to the environment. The proposed project complies with the SCEMP and with the CCP. In addition, the project is relatively small (compared to San Diego Bay overall, which is addressed in the INRMP) and is of a type that is periodically repeated on a wide scale (e.g., dredging activities occur throughout the bay periodically). As such, the proposed project is not expected to substantially change the ecosystem composition or result in permanent habitat loss. The proposed project would not impede implementation of the INRMP, and is consistent with the plan. Therefore, no impacts associated with a habitat plan would occur, and no mitigation is required.		
4.3 GEOLOGY AND SOILS		
Loss, Injury or Death Due to Seismic Conditions: The project site is susceptible to strong seismic ground shaking and liquefaction due to the proximity to the Rose Canyon Fault Zone. According to the City of San Diego Seismic Safety Study Maps, the project site is located in an area with a high potential for liquefaction. Construction of the proposed structures could expose people and structures to potential substantial adverse effects, including loss, injury, or death involving strong seismic ground shaking and liquefaction in the event of an earthquake. This is a significant impact requiring mitigation. The project site topography is low-lying, thus, landslides are not anticipated. The proposed project would result in a less than significant impact associated with landslides and no mitigation measures to address the risk of landslides are required.	**GEO-1 Geotechnical Report Recommendations.** The Project Applicant shall comply with the specifications and provisions of the geotechnical investigation prepared for the Pier 4 Replacement project (Terracosta Consulting Group, 2011) for the development of the new pier, new bulkhead sections, a new mooring dolphin, and related utilities. The recommendations of the study shall be implemented during final design and construction of the project. **GEO-2 Completion Report for Project Mitigation.** Within 30 days of project completion, but prior to any authorized use of the replacement pier, BAE Systems Environmental Manager or designee shall submit to the Port District and all affected resource and permitting agencies, a Completion Report detailing the completion and compliance with all mitigation measures contained in the proposed project's Mitigation Monitoring and Reporting Program (MMRP), including Mitigation Measure GEO-2. The Completion Report shall contain all logs and related documentation as required by each mitigation measure identified in the project's MMRP.	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
Soil Erosion: The project will comply with the Urban Stormwater Management Plan (USMP) and Storm Water Pollution Prevention Plan (SWPPP) prepared for the project, which include BMPs required to properly control erosion and siltation impacts during construction of the proposed project. No soil disturbance is proposed during project operations. Therefore, there are no project construction or operational impacts that would result in soil erosion.	No Mitigation Required	Less Than Significant
Soil Stability: The site vicinity is assigned a Geologic Hazard Category 31, which indicates a high liquefaction potential, shallow groundwater, and the presence of hydraulic fills. The undocumented fill soils consist of mixtures of sand, silt, and clay with shell and gravel. Hydraulically placed fills have a potential for liquefaction during cyclic ground motion. The loose and saturated portions of the Bay Deposits are also susceptible to liquefaction and are, therefore, unsuitable for the support of certain types of development. This is a potentially significant impact requiring mitigation.	Refer to **GEO-1 (Geotechnical Report Recommendations)** and **GEO-2 (Completion Report for Project Mitigation)**.	Less Than Significant
Expansive Soils: Most of the soils on the project site are considered to have a very low to low expansion potential, as these deposits are not likely to contain significant amounts of clay and are not listed as a type of clay soil. However, construction of the proposed structures could expose people and structures to potential substantial adverse effects, including loss, injury, or death involving strong seismic ground shaking and liquefaction in the event of an earthquake. This is a potentially significant impact requiring mitigation.	Refer to **GEO-1 (Geotechnical Report Recommendations)** and **GEO-2 (Completion Report for Project Mitigation)**.	Less Than Significant
Wastewater Disposal: The project site is served by sewer service from the City of San Diego. The project construction and operations do not propose the use of septic tanks or alternative wastewater disposal systems, so no septic tanks of alternative waste disposal systems would be required. Therefore, the proposed project would have no impact related to soils incapable of adequately supporting the use of septic tanks or	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
alternative waste water disposal systems.		
4.4 CLIMATE CHANGE AND GREENHOUSE GASES		
Greenhouse Gas Emissions: Based on the modeling conducted for the construction analysis, it is estimated that the project construction would generate up to 640 metric tons of CO_2 per year for two years. Annual GHG emissions related to construction would be below the County's screening threshold of 900 MT of CO_2e per year. Construction-related GHG emissions are less than significant. The GHG emissions resulting from increased electricity demand for lighting, crane operation, from the energy used for water delivery, treatment, and use, and from solid waste disposal are modeled using GHG emissions factors built into the CalEEMod model. It is estimated that project operations would generate up to 446 metric tons of CO_2 per year. Annual GHG emissions related to operations would be below the County's screening threshold of 900 MT of CO_2e per year. Operational-related GHG emissions are less than significant.	No Mitigation Required	Less Than Significant
Greenhouse Gas Plan, Policy, Regulation Consistency: The proposed project would be consistent with applicable greenhouse gas emission reduction strategies and policies. The project is the replacement of an existing facility and would not conflict with or impede implementation of reduction goals identified in AB 32, EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. In addition, the project would also be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the project. Therefore, the proposed project would not conflict with any applicable plan, program, policy, or regulation related to the reduction of GHG emissions. Impacts are considered less than significant.	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
4.5 HAZARDS AND HAZARDOUS MATERIALS		
Routine Transport, Use, and Disposal of Hazardous Materials Impacts: During construction activities, the project will require limited transport of potentially hazardous materials (e.g., fuels, lubricants, solvents, cleansers, paints) to and from the project site. Additionally, operation of the project could involve the temporary storage and handling of potentially hazardous materials such as petroleum products, pesticides, fertilizer, and other hazardous products such as paint products, solvents, and cleaning products. This type of storage, transfer, use, and disposal of potentially hazardous materials is extensively regulated at the local, state, and federal levels. It is not anticipated that the development of the project would result in conditions that are not currently addressed by existing regulations. On this basis, potential impacts due to routine transport, use, or disposal of hazardous materials are considered less than significant.	No Mitigation Required	Less Than Significant
Reasonable Foreseeable Upset and Accident Conditions: The demolition of existing marine structures (piers and dolphins) and the dredging of sediments would require the use of construction equipment, which could spill oil, gasoline, or other fluids during normal usage or during refueling. Dredging activities conducted during the construction phase could cause sediments to enter the water column impacting water quality and biological resources. During offloading activities, there is the potential for sediment to re-enter the water column leading to sediment suspension and potential contamination of the Bay floor adjacent to the offloading area. For dewatering activities, if pozzolonic agents are used, there is the potential for airborne dispersal of the agent if it is applied as a dry powder which can be a respiratory irritant to workers and nearby receptors. During construction activities, there is also the potential for the decant/storm water containment area to fail, resulting in release	**HAZ-1 Secondary Containment.** Prior to the commencement of dredging, demolition or construction activity, the project applicant shall install a secondary containment structure for the storage of all fuel, oil and other petroleum products, as required by the District Urban Stormwater Mitigation Plan. At all times during construction and operation of the project, the project applicant shall house all oil and fuel in a secondary containment structure to ensure that spilled or leaked oil or fuel will be prevented from entering the water column. **HAZ-2 Dredging Management Plan.** Prior to dredging operations, BAE Systems shall prepare a Dredging Management Plan (DMP) for review and approval by the Army Corps of Engineers (USACE). The project applicant shall implement the measures listed in the DMP during dredging operations. The DMP shall contain standard operating procedures for the project to assist the dredge	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
of untreated water from the sediment off-loading area (pier). A release of storm water or decant water could result in impacts in the vicinity of the release and potentially flow back into the Bay causing turbid conditions. This is a potentially significant impact requiring mitigation. The handling of hazardous materials in accordance with the HMBEP as required by applicable local, state, and federal standards, ordinances, and regulations would ensure that impacts associated with environmental and health hazards related to an accidental release of hazardous materials during operation are less than significant. Therefore, no mitigation is required.	contractor in preventing accidental spills and providing the necessary guidelines to follow in case of an oil or fuel spill. Typical BMPs for equipment failure or repair shall be identified in the DMP and shall include, but not be limited to: • Communication to project personnel; • Proper signage and/or barriers alerting others of potentially unsafe conditions; • All construction repair work to be conducted on land and not over water; • Repair work involving use of liquids to be performed with proper spill containment equipment (e.g., spill kit); and • A contingency plan identifying availability of other equipment or subcontracting options. In addition, the DMP shall include, at a minimum, the following measures to prevent accidental oil/fuel spills during construction activities: • Personnel involved with dredging and handling the dredged material shall be given training on their specific task areas, which will be identified in the Health and Safety Plan (H&S Plan). The training shall be carried out by BAE Systems per OSHA requirements. The training materials include but shall not be limited to the following: o Potential hazards resulting from accidental oil and/or fuel spills; and o Proper dredging equipment operation. • As an operational control element, all oil and fuel shall be housed in a secondary containment structure to ensure that any spill or leakage is prevented from	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	entering the water column. • Required instrumentation to avoid spillage of dredging material shall be identified for each piece of equipment used during dredging operations. • All equipment shall be inspected by dredge contractor personnel before starting the shift. These inspections are intended to identify typical wear or faulty parts that may contain oil or fuel. • Personnel shall be required to visually monitor for oil or fuel spills during construction activities. • In the event that a sheen or spill is observed, the equipment shall be immediately shut down and the source of the spill identified and contained. Additionally, the spill shall be reported to the applicable agencies presented in the DMP. • All personnel associated with dredging activities will be trained as to where oil/fuel spill kits are located, how to deploy the oil-absorbent pads, and proper disposal guidelines. The dredging barge shall have sufficient quantity of oil/fuel spill kits on board to allow for quick and timely implementation of spill containment. • Barge load limits and loading procedures will be identified, and the appropriate draft level will be marked on the materials barge hull. • Water discharge (decant water from sediment dredged in areas designated for upland disposal and storm water) to the San Diego Bay is prohibited. **HAZ-3 Contingency Plan.** The project applicant shall prepare and submit to the USACE for approval a Contingency Plan prior to the initiation of dredging and implemented for the duration of the dredging activity, to	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	address equipment and operational failures that could occur during dredging operations. The Contingency Plan shall include, but shall not be limited to the following measures to prevent a release of hazardous materials in the event of equipment failure, repair, or silt curtain breach: • Procedures for communication to project personnel; • Installation of proper signage and/or barriers alerting others of potentially unsafe conditions; • Specification for repair work to be conducted on land and not over water; • Identification of proper spill containment equipment (e.g., spill kit); • Identification of other equipment or subcontracting options; • Emergency procedures to follow in the event of equipment failure or release; • Incident reporting and review procedure to evaluate the causes of an accidental release and steps to avoid further incidents; • Response procedures in the event of barge overfill; and • Procedures for prompt notification of the District and all other regulatory agencies. **HAZ-4 Health and Safety Plan.** The project applicant shall prepare and submit to the USACE for approval a Health and Safety Plan prior to the initiation of dredging and implemented for the duration of the dredging activity. The H&S Plan will be prepared in general accordance with Federal Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response Standard (29 Code of Federal Regulations [CFR] 1910.120)	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	and Title 8 California Code of Regulations (CCR) Section 5192. The H&S Plan will be reviewed and approved by a Certified Industrial Hygienist and at the project applicant's expense. The H&S Plan will include the following requirements at a minimum: • Training for operators to prevent and respond to releases; • Identification of appropriate Personal Protection Equipment for all construction activities, including personal floatation devices, hard hats, and work shoes/clothing; • Training in the safe operation of cranes, barges, tugs, and support craft; • Site evacuation and emergency first aid response; and • Documentation that requires that health and safety procedures have been implemented. **HAZ-5 Communication Plan.** Prior to the initiation of dredging activities, the project applicant shall prepare and submit to the USACE for approval a Communication Plan and operational guidelines for communications between the U.S. Coast Guard and all vessel operators to ensure the safe movement of project vessels from the dredge to the unloading area. Features of the Communication Plan will include at a minimum: • Identification of vessel speed limitations (e.g., wake/no wake); • Notification to project personnel using air horns as necessary; and • Staging the dredge activity to control the amount of material being handled, dewatered, and transported to	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	reduce the potential for accidents or incidents related vessel operation. **HAZ-6 Upland Dredging Operation Practices.** During dredging operations, BAE Systems shall ensure that the dredge contractor is implementing standard BMPs for minimizing resuspension and spillage through contractor contract specifications. Such BMPs shall include, but not be limited to, the following: • The contractor shall remove dredge material and not stockpile material on the bottom of the San Diego Bay floor, and shall not sweep or level the bottom surface with the bucket. • The contractor shall not overfill the digging bucket because overfill results in material overflowing back into the water. • The contractor shall deploy inner- and outer-boundary floating silt/turbidity curtains for the dredge areas subject to upland disposal. These two curtains (also referred to as "double" silt/turbidity curtains) will be located around the dredge activity area at all times and around the immediate dredge barge/bucket area. These double silt/turbidity curtains shall be utilized for containment of the dredge area, while configurations, technologies, and actual locations of silt curtains in relation to the dredge barge shall be finalized during the design phase of the project. • Contractors shall control the swing radius of the unloading equipment within the silt curtain and to reduce the amount of sediment spillage in the dredge area. • The contractor shall not overfill the material barge to a point where overflow or spillage could occur. Each material barge shall be marked in such a way to allow	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	the operator to visually identify the maximum load point. The marking should allow sufficient interior freeboard to prevent spillage in rough water such as ship wakes during transit. Initiating the material barge marking shall minimize impact of load spillage during transit to the ocean disposal site. • The contractor shall not use weirs as a means to dewater the scow and shall allow additional room for sediment placement. Preventing this action shall minimize the introduction of turbidity to the water column. • The contractor shall place material in the material barge such that splashing or sloshing does not occur, which could send sediment back into the water. Splashing can be controlled by restricting the drop height from the bucket. • If the use of a grate to collect debris is required, the contractor shall not allow material to pile up on the grate and flow or slip from the grate back into the water. The debris scalper shall be positioned in such a way as to be totally contained on the shore side of the unloading operations. The dredge operator shall visually monitor for debris build-up and alert the support personnel on the barge to assist in clearing the debris, as necessary. Debris that is derived from dredging activities shall be removed from the grate by the environmental clamshell bucket and placed in a contained area on the dredge barge or in a second material barge for subsequent removal and disposal. • The contractor shall restrict barge movement and work boat speeds (i.e., reducing propeller wash) in the dredge area.	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	• For dredged sediment subject to upland disposal, the contractor shall reduce hardscape spillage that could occur during the transfer from excavator arm onto transport vehicles by sloping the hardscape near the spill plate into a collection sump or alternative means (e.g., pier containment) to allow water and fluidized mud that may fall to be collected. • For dredged sediment subject to upland disposal, the contractor shall use a power wash unit to reduce impacts related to spillage from the excavator arm onto transport vehicles. In the event that sediment is spilled onto the transport vehicle, it can be quickly washed into the collection sump. • Additional requirements as referenced in Mitigation Measure BIO-14 shall be applied to upland dredging activities as applicable. **HAZ-7 Binding Agents.** During the construction phase of the proposed project, the Project Applicant shall specify through construction contract specifications, that pozzolonic agents, if used for dredge sediment destined for upland disposal, shall be applied through a wet application blending process. This method of blending shall utilize the procedures identified for the BAE Systems' Dry Dock Sump Maintenance Dredging Project or another project subject to review and approval by the District. **HAZ-8 Dewatering.** At all times during construction and operation of the proposed project, the project applicant shall ensure that the decant from dredged sediments subject to upland disposal and storm water containers are sealed when not in use to avoid overflowing during a storm event. This would involve the decant and/or storm water being collected in a sump in the operation area, pumped to aboveground tanks, and disposed of either within the	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
	sanitary sewer or off site. The storage areas shall be surrounded by a curb, dike, berm, or some other type of secondary containment system. All paved storage areas shall be free of cracks and gaps, and shall be able to contain leaks and overflows until they can be addressed. **HAZ-9 Haul Trucks.** Prior to dredging activities, the Project Applicant shall require the contractor to accept the following construction contraction specifications: • Truck loads are limited to ensure sufficient freeboard to prevent spillage during transport. • Haul trucks leaving the project site shall be covered and secured per Caltrans regulations during transport to the disposal facility. • Trucks hauling dredged sediment shall be loaded within a constructed loading zone to confine sediment spilled during the loading process. • Prior to entering the roadway, the vehicles will be power washed to prevent cross-contamination onto the roadways. **HAZ-10 Completion Report for Project Mitigation.** Within 30 days of project completion, but prior to any authorized use of the replacement pier, BAE Systems Environmental Manager or designee shall submit to the Port District and all affected resource and permitting agencies, a Completion Report detailing the completion and compliance with all mitigation measures contained in the proposed project's Mitigation Monitoring and Reporting Program (MMRP), including Mitigation Measures HAZ-1 through HAZ-10. The Completion Report shall contain all logs and related documentation as required by each mitigation measure identified in the project's MMRP.	

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
Existing or Proposed School: The closest existing or proposed school to the project site is Woodbury School of Architecture located approximately 1,540 feet (0.29 mile) from the project boundary. Since there are no public or private schools located within 0.25 mi of the project site, no impacts associated with this issue would occur during the construction or operational phase of the proposed project. No mitigation measures are required.	No Mitigation Required	Less Than Significant
Located on a List of Hazardous Materials Sites: The project includes dredging in two areas (Dredge Sub-Phase B2 and Sub-Phase C) that are within the approved CAO R9-2012-0024 remedial footprint. The area within the CAO is listed on the list of hazardous material sites compiled pursuant to Government Code Section 65962.5. However, the area within the approved CAO would be subject to requirements and standards identified under the San Diego RWQCB CAO No. R9-2012-0024 for the Shipyard Sediment site. Therefore, it is not anticipated that the construction of the proposed project would create a significant hazard to the public or the environment as a result of the proximity to a Government Code Section 65962.5 listed site. Once the construction activities cease and resuming of pier operations begins, the project site would not be listed on the list of hazardous material sites. Therefore, no impacts associated with this issue would occur and no mitigation measures are required.	No Mitigation Required	Less Than Significant
Exposure of People to Public Airport Hazards: The nearest airport to the proposed project site is within the North Island Naval Complex, located approximately 3.0 miles west of the project site. Construction and operational activities are not anticipated to introduce any new uses that would deviate from existing shipyard repair facility equipment or activities. Therefore, the construction and operation of the proposed project would not result in a new public airport safety hazard for people working within the project area. Impacts associated with	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
this issue would be less than significant and no mitigation measures are required.		
Exposure of People to Private Airstrip or Helipad Hazard: The closest heliport to the project site is the San Diego Police Headquarters Heliport - CA47, which is approximately 1.75 miles away. Construction and operational activities are not anticipated to introduce any new uses that would deviate from existing shipyard repair facility equipment or activities. Therefore, the proposed project would not result in a new airstrip/heliport safety hazard for people working within the project area. Impacts associated with this issue would be less than significant and no mitigation measures are required.	No Mitigation Required	Less Than Significant
Emergency Response Plan: The proposed project would not have any direct effect on an adopted emergency response plan, or emergency evacuation plan. The proposed project will be designed and conditioned to provide required circulation and fire access to allow for ingress and emergency vehicles and egress of employees. Therefore, the proposed project would not be in conflict in any way with the City of San Diego Fire Department, the County of San Diego emergency services and the District emergency services response or emergency evacuation plans. Therefore, impacts associated with this issue are anticipated to be less than significant impact and no mitigation measures are required.	No Mitigation Required	Less Than Significant
Wildland Fires: The project site is located within an urbanized, industrial area removed from wildlands. Replacement of the existing pier with a new pier would not expose persons or property to increased wildland fire risks. No fire hazards related to wildlands are anticipated with implementation of the proposed project. No impacts are anticipated to occur, and no mitigation is required.	No Mitigation Required	Less Than Significant
4.6 HYDROLOGY AND WATER QUALITY		
Violation of Water Quality Standards: Accidental oil or fuel	**HYD-1 Pre-construction Meeting.** BAE Systems	Less Than

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
spills that could potentially occur during the proposed dredging operations could impair and/or degrade water quality in San Diego Bay, depending on the severity of the spill. Such events are likely to be localized spills of lighter, refined diesel fuels, gasoline, and lubricating oils that are highly toxic to marine life. The potential for the occurrence of petroleum-product leaks or spills is low, but the potential for a significant impact to marine resources is moderate to high. This is a potentially significant impact that would require mitigation. The operational phase of the proposed project is a continuation of existing shipyard repair activities and would not introduce any new uses that would affect water quality in the area. Impacts associated with this issue are anticipated to be less than significant and no mitigation measures are required.	Environmental Manager or designee will ensure that the contractor shall hold a pre-construction meeting to review all construction mitigation requirements with the construction crew. The purpose of the meeting will be to review the relevant project features, regulatory requirements and mitigation measures to ensure implementation, and to review mitigation monitoring tracking program and log requirements. Invitations and notifications of the pre-construction meeting shall be made to Port District Environmental and Land Use Management staff, as well as affected resource and permitting agency staff. **HYD-2 Completion Report for Project Mitigation.** Within 30 days of project completion, but prior to any authorized use of the replacement pier, BAE Systems Environmental Manager or designee shall submit to the Port District and all affected resource and permitting agencies, a Completion Report detailing the completion and compliance with all mitigation measures contained in the proposed project's Mitigation Monitoring and Reporting Program (MMRP), including Mitigation Measure HYD-1. The Completion Report shall contain all logs and related documentation as required by each mitigation measure identified in the project's MMRP.	Significant
Depletion of Groundwater Supplies/Interference with Groundwater Recharge: Construction activities that would occur under the proposed project would require minimal amount of water as the majority of the construction activities are not water-demand intensive. Groundwater at the project site has substantial saltwater intrusion and is unsuitable for use as drinking water. The proposed project would not use groundwater resources or otherwise affect any groundwater resources that are used for water supply during project construction. Therefore, impacts associated with this issue are anticipated to be less than significant and no mitigation	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
measures are required. The operational phase of the proposed project is a continuation of existing shipyard repair activities and would not introduce any new uses that would substantially deplete groundwater supplies or interfere substantially with groundwater recharge. No impacts are anticipated for this issue area, and no mitigation measures are required.		
Alter Drainage Patterns: The proposed project would not substantially alter the existing hydrological patterns of the project site. The proposed project will be constructed on previously developed areas that are covered in impervious surfaces and do not contain defined drainage patterns. The new replacement Pier 4 would occupy a similar (slightly larger) footprint as the existing Pier 4, and therefore will not result in significant changes in absorption rates, drainage patterns, or the rate and amount of surface runoff. In addition, no waterways flow through the project site, so the alteration of a stream or river would not occur. Therefore, impacts associated with this issue are anticipated to be less than significant, and no mitigation is required.	No Mitigation Required	Less Than Significant
Exceed Stormwater Drainage Capacity: The proposed project would be responsible for adhering to stormwater requirements implemented by the Port as part of the MS4 permit, Any additional runoff that would be generated during the operational phase of the proposed project would be routed to the existing SWDS system on site which would meet on-site water detention requirements. Therefore, impacts associated with this issue would be less than significant and no mitigation measures are required.	No Mitigation Required	Less Than Significant
Degrade Water Quality: Approximately 6,256 cy or 0.70 acre of dredged sediments (Dredging Sub-Phase B2 (2,006 cubic yards) and Dredging Sub-Phase C (4,250 cubic yards)) are within the remedial footprint for the Shipyard Sediment Project	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
site and would be under the requirements for CAO No. R9-2012-0024. For the purpose of this analysis, it is assumed that dredging and upland disposal of 6,256 cy of dredged material within the CAO remedial footprint will be incorporated into the proposed project. Since dredging conducted within the remedial footprint included in the CAO (approximately 0.70 ac) will be accomplished in accordance with the requirements of the adopted CAO, subject to the approval of the San Diego RWQCB, water quality impacts associated with this issue would be less than significant. No additional operational activities associated with the proposed project are anticipated to otherwise substantially degrade water quality. No impacts associated with this issue would occur and no mitigation measures are required.		
Impede or Redirect Flood Flows: Construction activities would include the construction of the modernized Pier 4 replacement and installation of a new bulkhead structure and mooring dolphin. These structures are within the San Diego Bay and are unlikely to impede or redirect flood flows due to the open water area. Therefore, impacts associated with this issue are anticipated to be less than significant and no mitigation measures are required.	No Mitigation Required	Less Than Significant
Expose People or Structures to a Significant Risk Involving Flooding: The project site is not identified as being within a dam failure zone and is not located near a levee. An extreme storm event could result in temporary ponding of water on the pier, shoreline, and adjacent land, but, given the essentially flat nature of the site, there would be no generation of rapid currents that could threaten people or property. The marine structures on the site would be industrial, and, in the event of an extreme storm that caused on-site flooding, workers would be evacuated from the site. Therefore, impacts associated with this issue are anticipated to be less than significant and no	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
mitigation measures are required.		
Inundation by Seiche, Tsunami, or Mudflow: The project site is identified as being within a coastal storm/erosion/tsunami hazard area. However, the project site is not within an identified FEMA VE Zone, which is a high-risk tsunami zone. The project site is also not identified as being within a landslide/mudslide zone. While there is a potential for tsunami exposure, the probability of a tsunami hitting the project site without warning is low regardless of implementation of the proposed project. In the event that a seismic event causes a tsunami that would hit the project area, workers would be evacuated from the site. Impacts associated with this issue would be less than significant and no mitigation measures would be required.	No Mitigation Required	Less Than Significant
4.7 LAND USE AND PLANNING		
Physically Divide an Established Community: The project site does not contain any existing housing, nor does the site constitute part of an established community or neighborhood. The proposed project would be wholly contained within the existing ship repair facility and within the existing BAE Systems leasehold. The construction and operation of the proposed project would neither displace residents nor divide an existing established community. No impact related to this issue would occur.	No Mitigation Required	Less Than Significant
Conflict with Applicable Land Use Plans, Policies, or Regulations: Construction of the proposed project would not conflict with any applicable land use plans, policies, or regulations as the project is consistent with the existing PMP land use designations and overarching goals of the PMP Precise Plan. The proposed project would not conflict with the California Coastal Act as the project entails the replacement of an existing marine industrial pier, and would continue to protect the environmental health of the tidelands. No land use consistency impacts would occur and no mitigation is required.	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
Conflict with Any Applicable Habitat or Natural Community Conservation Plan: Although the proposed project would not conflict with any applicable habitat or natural community conservation plan, there is a potential for biological resources to be affected which may conflict with the Southern California Eelgrass Mitigation Policy. This is a potentially significant impact requiring mitigation.	Refer to Mitigation Measure BIO-11.	Less Than Significant
4.8 NOISE		
Exposure to or Generation of Excessive Noise Levels: The increase in traffic flow on the surrounding roads due to construction traffic is expected to be minimal. The project would less than 1 percent of the existing traffic volumes. Although there would be short-term intermittent high noise levels of up to 86 dBA L_{max} at a distance of 50 ft associated with trucks passing by from the project site the effect of long-term ambient noise levels would not exceed the City's 75 dBA L_{eq} construction noise threshold Sensitive receptors include residences and schools. The closest residences (approximately 1,850 ft from the construction boundary) would be exposed to construction noise levels of up to 60 dBA L_{max}. As the maximum noise level is projected to be 60 dBA or lower, the 12-hour average noise level at these residences would not exceed the City's 75 dBA L_{eq} construction noise threshold. The Woodbury School of Architecture is located approximately 1,540 ft from the construction boundary and would be exposed to construction noise levels of up to 61 dBA L_{max}. As the maximum noise level is projected to be 61 dBA or lower, the 12-hour average noise level at the school would not exceed the City's 75 dBA L_{eq} construction noise threshold. Jetting of new piles during construction activities would generate excessive noise impacts that would be considered a significant impact requiring mitigation. The equipment used to	Refer to Mitigation Measure BIO-3	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
install the piles could be impact pile drivers, vibratory pile drivers, or jet-wash pile installation method. **Mitigation Measure BIO-3** limits the frequency of pile driving and requires that the contractor commences pile driving work with one blow followed by a 1-minute period of no pile driving, in order to encourage turtles and marine mammals in the area to leave the project site. Project operations are not anticipated to result in significant noise impacts. The proposed on-site uses would not be exposed to traffic noise exceeding the City's 75 dBA CNEL noise standard for industrial uses. Therefore, it is not anticipated that the reconstructed Pier 4 will result in a significant increase in operational activity and associated noise. The maximum noise level is projected to be 40 dBA or lower, the 1-hour average noise level at sensitive receptor sites would not exceed even the City's most stringent 40 dBA L_{eq} nighttime noise threshold. Therefore, operations activities would not result in a significant impact and no mitigation would be required.		
Excessive Vibration: The nearest sensitive receptor locations, including the residences and a school, are more than 1,000 ft from the project site and would not be affected by vibration associated with construction or on-site operational activities. No impacts associated with this issue would occur.	No Mitigation Required	Less Than Significant
Public Airport Noise Levels: The proposed project is not located within Airport Influence Area for San Diego International Airport and is outside the identified noise contours for the airport. The proposed project would result in the continuation of existing shipyard repair activities and would not result in any new exposure to airport noise above existing levels. Therefore, no impacts associated with this issue would occur, and no mitigation is required.	No Mitigation Required	Less Than Significant
Private Airstrip Noise Levels: The proposed project is not located near a private airstrip. The proposed project	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
construction and operations would not result in any new project-related safety noise hazards for those working within the project vicinity. Therefore, no impacts associated with this issue would occur, and no mitigation measures would be required.		
4.9 TRANSPORTATION AND TRAFFIC		
Exceed Capacity of Existing Circulation System: All study area intersections will continue to operate at an acceptable LOS (D or better) in both a.m. and p.m. peak hours during construction of the proposed project. The project will not generate vehicle trips or increase intersection delay during the a.m. and p.m. peak hour. All study area roadway segments are forecast to operate at an acceptable LOS (D or better) with the addition of project traffic, with the exception of Boston Avenue between 28th Street and I-5 Southbound Ramp (LOS F). However, the addition of project construction traffic will not increase the v/c ratio greater than 0.01 along Boston Avenue between 28th Street and the I-5 Southbound Ramp therefore, implementation of the project would not cause a significant impact along a study area roadway segment. The project will have less than significant impacts, and no mitigation is required.	No Mitigation Required	Less Than Significant
Air Traffic Patterns: The proposed project does not consist of any uses that would cause changes to air traffic volumes or otherwise affect air traffic patterns. Additionally, the proposed project does not include any visual, electronic, or physical hazards to aircraft in flight and is not anticipated to disrupt or alter air traffic patterns, including either an increase in traffic levels or a change in location. As such, no impacts associated with this issue would occur.	No Mitigation Required	Less Than Significant
Design Hazards: The proposed project construction consists of the replacement of a pier, associated facilities, and dredging activities. No temporary or permanent changes to the design of	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
roadways within the project area are planned as part of this project. Therefore, no increase in hazards due to a design feature of the project is expected, and no mitigation is required.		
Emergency Access: The proposed project construction traffic will use existing streets that currently experience truck traffic as a result of port industrial and marine uses in the area. There would be no change to existing emergency access routes and the proposed project will be designed, constructed, and maintained in accordance with applicable standards associated with vehicular access, ensuring that vehicular access will provide for adequate emergency access. Compliance with existing regulations for emergency access and evacuation would ensure that impacts related to this issue are less than significant and no mitigation is required.	No Mitigation Required	Less Than Significant
Alternative Transportation: Construction and operation of the proposed project does not require the modification of any alternative transportation facilities such as bus stops or bicycle paths. Therefore, the proposed project does not conflict with adopted plans, policies, or programs supporting alternative transportation, and no mitigation is required.	No Mitigation Required	Less Than Significant
4.10 UTILITIES AND SERVICE SYSTEMS		
Wastewater Treatment Requirements: Compliance with the existing industrial wastewater permit requirements would ensure that discharges into the existing wastewater treatment facility system from the operation of the proposed project would not exceed applicable San Diego Regional Water Quality Control Board wastewater treatment requirements. Therefore, no significant impact related to this issue would occur.	No Mitigation Required	Less Than Significant
Construction of Expansion of Water Treatment Facilities: The proposed project is the replacement of an existing pier facility and would not require the construction of new water treatment facilities or expansion of existing facilities, which could cause significant environmental effects; and impacts related to	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
this issue would be less than significant.		
Adequate Water Supply: Construction activities that would occur under the proposed project would not generate a measurable increase in water demand to implement construction beyond the current availability of water provided at the site. A less than significant impact would occur. There will be no change to the use of the site as a ship repair facility; the site is already served by municipal water, and the project is consistent with the PMP and the 2004 Regional Water Facilities Master Plan (WFMP). The WFMP identifies that there is sufficient water capacity to serve the proposed project. Therefore, project impacts associated with an increase in potable water demand are considered less than significant.	No Mitigation Required	Less Than Significant
Wastewater Treatment Capacity: Construction activities that would occur under the proposed project would not generate an increase in wastewater generation to implement construction as temporary wastewater facilities (e.g., portable facilities) would be provided by the construction contractor to accommodate the construction crew. Therefore, construction activities would not generate additional wastewater beyond that currently existing at the proposed project site. A less than significant impact would occur. It is assumed that an increase in wastewater generation of approximately 1,400 gallons per day over the existing condition would occur with project implementation. Because capacity exists at the PLWWTP for the proposed project, no expansion of the PLWWTP would be required. Adherence to standard requirements identified by the City associated with the design and installation of new sewage infrastructure and connections to existing sewer infrastructure would ensure that no significant impacts would result from the construction or operation of the proposed project.	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
Stormwater Drainage Requirements: During construction activities, pumps will be installed to pump storm water out of the sumps and into storm water collection tanks. Two additional 25,000 gallon SWDS tanks (50,000-gallon total capacity) will be installed to accommodate the anticipated increase in stormwater flows with construction of the slightly larger pier. The proposed project would replace the existing storm water conveyance system within the project site with a similar storm water conveyance system that would be able to handle existing and anticipated storm water flows. Approvals of drainage features/improvements are made through the plan check process. As part of this process, all project-related shore-side drainage features and stormwater requirements would be required to meet the District's standards. No significant impacts would result and no mitigation measures are required.	No Mitigation Required	Less Than Significant
Solid Waste Facilities: The project is estimated to generate up to 421 tons of dredged materials daily. The volume of solid waste that could be generated by the proposed project represents up to 7.2 percent of the current permitted throughput and up to 13 percent of the current daily surplus capacity at the Otay Landfill. In the event that any of the sediment testing determines that the dredge spoils are hazardous, those materials would require transport to a hazardous waste facility (a Class I facility). This facility is anticipated to be the Clean Harbors facility in Buttonwillow, California which includes 160 disposal acres, a maximum permitted throughput of 10,482 tons per day, and an anticipated closure date of 2040. The amount of dredged materials trucked per day would represent approximately 4.0 percent of the Clean Harbors facility daily maximum throughput capacity. Concrete debris from the bulkhead removal and reconstruction (totaling approximately 5,355 cy of concrete) will be disposed at	No Mitigation Required	Less Than Significant

Table 2.A: BAE Systems Pier 4 Replacement Project - Environmental Summary

Issues/Impacts	Mitigation Measures	Level of Significance after Mitigation
sea, recycled locally, or transported to Otay landfill. As described above, there is sufficient capacity at Otay landfill to accommodate the demolition debris if needed. Operation of the proposed project will be similar to current and recent operations. There will be no change to the use of the site as a ship repair facility. Therefore, the proposed project would not result in a substantive increase in solid waste. The project is served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Impacts associated with this issue are anticipated to be less than significant. No mitigation would be required.		
Solid Waste Regulations: All development within the District is required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, State, and Federal solid waste disposal standards. Therefore, impacts associated with this issue are less than significant.	No Mitigation Required	Less Than Significant

Section 3.0

Errata and Revisions

The text of the Draft EIR has been modified to reflect typographical errors or to make minor clarifications. The following errata pages detail the changes made to the Draft EIR. These changes are denoted in ~~strikeout~~ and underline format. The errata sheets include minor modifications to the text of the draft document as reflected in response to the comment letters.

The following is a list of pages requiring text changes, indicating the EIR section and page in which the changes are to be included in this Final EIR. All changes on the listed page numbers are discussed in further detail in this errata.

Table 3.A: Changes to the Draft EIR

EIR Section	Page Number
1.0 Executive Summary[1]	1-10, 1-11, 1-12, 1-13, 1-35
3.0 Project Description	3-28
4.2 Biological Resources	4.2-6, 4.2-7, 4.2-20 – 4.2-22, 4.2-25, 4.2-28, 4.2-38
8.0 References	8-1

Draft EIR Section 1.0 – Executive Summary

Page 1-35

Additional clarifying text has been added as follows:

> "Impact hammer pile driving ~~Jetting of new piles~~ during construction activities would generate excessive noise impacts that would be considered a significant impact requiring mitigation. The equipment used to install the piles could be impact pile drivers, vibratory pile drivers, or jet-wash pile installation method. **Mitigation Measure BIO-3** limits the frequency of impact hammer pile driving and requires that the contractor commences pile driving work with one blow followed by a 1-minute period of no pile driving, in order to encourage turtles and marine mammals in the area to leave the project site. ~~by requiring 5-minute breaks between blows).~~"

Draft EIR Section 3.0 – Project Description

Page 3-28

The text in Section 3.4.6 of the Draft EIR states:

> "The post-dredge condition will be –35 ft MLLW, with between 0 and 2 ft over-depth. So, the post-dredge condition is expected to be between –35 ft and –37 ft MLLW. The existing condition ranges from –29 ft. to –33 ft MLLW."

[1] The executive summary is Section 1.0 of the Draft EIR and Section 2.0 of the Final EIR.

This text is clarified and updated in the Final EIR (through this Response to Comment and list of Errata) to read:

> "The post-dredge condition will be –35 ft MLLW, with between 0 and 2 ft over-depth. So, the post-dredge condition is expected to be between –35 ft and –37 ft MLLW. The existing condition ranges from –29 ft. to –33 ft MLLW for the majority of the dredge footprint, however, the area adjacent to the shoreline is more shallow with depths ranging from 0 to 20 feet located in a narrow band immediately adjacent to the bulkhead shoreline."

Page 3-28

Preliminary testing has also been done for dredge Sub-Phase B1. The initial results indicate that upland disposal will be the appropriate course of action for this dredging phase. The text in Table 3.C of the Draft EIR has been revised as follows:

Table 3.C: Dredging Phases

Phase	Quantity (cubic yards)	Disposal Disposition	Vertical Depth	Phase Within Cleanup Abatement Order Footprint?
A1	27,500 cy	Ocean	Dredge to -35 ft	No
A2	1,200 cy	Upland	Dredge to -35 ft	No
B1	6,952 cy	~~Ocean~~ Upland	Dredge to -35 ft	No
B2	2,006 cy	Upland	Dredge to between -35 ft and -37 ft	Yes
C	4,250 cy	Upland	Top 2 feet	Yes
Total	**41,908 cy**			

Source: BAE Systems, March 2012.

Page 3-51

Additional clarifying text has been added to as follows:

> "Other actions that must be taken by the District at the staff level in order for the proposed project to proceed include:
>
> - Approval of Engineering Plans; and
> - Approval of bay coverage mitigation. ~~an artificial reef, if located within District jurisdiction.~~"

Page 3-52

Minor changes have been made to Table 3.F to provide further clarification as follows:

Table 3.F: Potential Permits

Agency/Department	Permit	Action Associated With or Required For
Federal Agencies		
United States Army Corps of Engineers (USACE)	Individual/Nationwide Section 404 Permit (CWA, 33 USC 1341)	Responsible for issuing Section 404 permits for dredged or fill material into waters of the U.S. (up to higher high water line in tidal waters) and into wetlands in compliance with EPA regulations.
	Section 10, Rivers and Harbors Act Permit	Regulates construction, excavation, and deposition in navigable waters (up to mean high water in tidal waters).
	Marine Protection, Research, and Sanctuaries Act of 1972, Section 103	Regulates dumping and transport for dumping of material into U.S. waters.
	40 CFR, Part 227 – Criteria for the Evaluation of Permit Applications for Ocean Dumping of Materials	Regulates dumping of materials into U.S. waters and evaluates the need for ocean disposal.
United States Environmental Protection Agency	Ocean Dumping Permit	Ocean Disposal
United States Coast Guard	Concurrence with Ocean Dumping Permit	Ocean Disposal
National Marine Fisheries Service (NMFS) and United States Fish and Wildlife Service	Concurrence with Ocean Dumping Permit	Ocean Disposal
State Agencies		
State Water Resources Control Board, Regional Water Quality Control Board (RWQCB)	401 Certification (CWA, 33 USC 1341, if the project requires USACE 404 Permit) Water Discharge Requirements (WDRs) for dredging	Discharge into waters and wetlands (see USACE Section 404 Permit); approval of dredge and disposal within the remedial footprint of the CAO.
California Coastal Commission	Coastal Development Permit	Development outside the District's jurisdiction.
State Lands Commission (SLC)	Amendment to Lease PRC 8054.1	Development within the State Land Commission's jurisdiction. ~~Approval of an artificial reef, if located within SLC jurisdiction~~
California Department of Fish and Game	Concurrence with Ocean Dumping Permit	Ocean Disposal
Local Agencies		
San Diego Unified Port District	Coastal Development Permit	Development within the Coastal Zone.
City of San Diego	Building permits	Construction of shoreside electrical and mechanical (piping) improvements.

CFR = Code of Federal Regulations CWA = Clean Water Act EPA = Environmental Protection Agency
PRC = Public Resource Code CAO = Cleanup and Abatement Order USC = United States Code

Draft EIR Section 4.2 – Biological Resources

Page 4.2-6

Global typographical change from California Least Tern to California least tern. The text in Table 4.2.B of the Draft EIR has been revised as follows:

Table 4.2.B: Protected Species Observed or Expected to Occur within the Study Area

Common Name	Scientific Name	Status	Occurrence at Project Site
California Brown Pelican	*Pelecanus occidentalis californicus*	CDFG FP	Likely
Double-crested Cormorant	*Phalacrocorax auritus*	CDFG WL	Likely
~~California Least Tern~~ California least tern	*Sternula antillarum browni*	SE, FE	Likely*
Green Sea Turtle	*Chelonia mydas*	FT	Not expected
Harbor Seal	*Phoca vitulina*	MMPA	Not expected
California Sea Lion	*Zalophus californianus californianus*	MMPA	Uncommon

SE – State Endangered; **FE**- Federally Endangered; **FT** – Federally Threatened; **CDFG-FP** – CDFG Fully Protected Species; **CDFG-WL**- CDFG Watch List; **MMPA** – species protected by the Marine Mammal Protection Act

* California least terns are a migratory species found in the area from approximately April 1 through September 15 of each year.

Page 4.2-7

Global typographical change from California Least Tern to California least tern. The text in the DEIR has been revised as follows:

> "The nearest ~~least~~ California least tern nesting colony is located at Delta Beach, Naval Air Base (NAB) Coronado, along the Silver Strand approximately 1.8 miles to the southwest of the project site."

Page 4.2-20

Global typographical change from California Least Tern to California least tern. The text in Table 4.2.C of the Draft EIR has been revised as follows:

Table 4.2.C: Protected Species Observed or Expected to Occur within the Study Area

Common Name	Scientific Name	Status	Occurrence at Project Site
California Brown Pelican	*Pelecanus occidentalis californicus*	CDFG FP	Likely
Double-crested Cormorant	*Phalacrocorax auritus*	CDFG WL	Likely
~~California Least Tern~~ California least tern	*Sternula antillarum browni*	SE, FE	Likely*
Green Sea Turtle	*Chelonia mydas*	FT	Not expected
Harbor Seal	*Phoca vitulina*	MMPA	Not expected
California Sea Lion	*Zalophus californianus californianus*	MMPA	Uncommon

SE – State Endangered; **FE**- Federally Endangered; **FT** – Federally Threatened; **CDFG-FP** – CDFG Fully Protected Species; **CDFG-WL**- CDFG Watch List; **MMPA** – species protected by the Marine Mammal Protection Act

* California least terns are a migratory species found in the area from approximately April 1 through September 1 of each year.

Page 4.2-21

Additional clarifying text has been added to Mitigation Measure BIO-1 and to the Executive Summary as follows:

> **"BIO-1 Biological Monitoring For Special-Status Species.** During impact hammer pile driving project activities, the project applicant ~~contractor~~ shall retain a qualified biologist to monitor project activities in accordance with the mitigation measures below. The Biological Monitor shall be authorized to temporarily halt or redirect work. The Biological Monitor shall keep logs recording site activities, species observed and their behavior during construction activities, and, if needed, actions taken to avoid impacts to species. These logs shall be maintained by BAE Systems. In the event that the Biological Monitor suspects that work being conducted would have significant adverse effects to special status species (e.g. marine mammals or~~,~~ turtles), he/she shall immediately notify the contractor and BAE Systems and impose corrective measures. If the situation is not remedied immediately, the monitor shall notify the permitting agencies."

Page 4.2-21

Additional clarifying text has been added to Mitigation Measure BIO-2 and to the Executive Summary as follows:

> **"BIO-2 Biological Monitoring of Impact Hammer ~~and~~ Pile Driving.** During construction, the project applicant shall retain a qualified Biological Monitor to ~~shall~~ conduct monitoring within 500 feet of any active impact hammer pile driving. The contractor shall not start work if any observations of turtles or marine mammals are made prior to starting impact hammer pile driving. The applicant shall ensure that work will not re-commence until the turtle(s) or marine mammal(s) have left the area, or ten minutes have passed."

Page 4.2-21

Additional clarifying text has been added to Mitigation Measure BIO-4 and to the Executive Summary as follows:

> **"BIO-4 Vessel Speed.** The project applicant ~~contractor~~ will ensure that construction vessel traffic shall adhere to the existing no wake zone requirements for the shipyard and not exceed a maximum speed of 5 knots (5.75 miles per hour) within 500 feet of any BAE Systems seawall, pier, or mooring dolphin."

Page 4.2-22

Additional clarifying text has been added to Mitigation Measure BIO-5 and to the Executive Summary as follows:

> **"BIO-5 Turbidity Curtain.** Regardless of the timing of dredging for ~~the upland disposal~~ dredging areas A-2, B-1, B-2, and C ~~dredging~~, the project applicant ~~contractor~~ shall deploy a silt ~~turbidity~~ curtain around the dredging areas to restrict the surface visible turbidity plume to the area of construction and dredging. It shall consist of a hanging weighted curtain with a surface float line and shall extend from the surface to 20 ~~twenty~~ feet down into the water column. The turbidity curtain shall be kept a minimum of 30 feet away from staked eelgrass beds in order to prevent

damage to eelgrass beds from curtain drag or movement. The goal of this measure is to minimize the area of the Bay in which visibility of prey by terns is obstructed. The applicant shall ensure that this measure is implemented for the duration of dredge activity."

Page 4.2-22

Additional clarifying text has been added to Mitigation Measure BIO-6 and to the Executive Summary as follows:

"BIO-6 Biological Monitoring During Breeding Season. Should impact hammer pile driving activities be conducted during the breeding season, a qualified Biological Monitor shall be retained by the project applicant ~~contractor~~ at its expense to conduct monitoring within 500 feet of construction activities and a silt curtain installed during breeding season ~~and during use of the silt curtain during breeding season~~. The monitor shall be empowered to delay commencing work, and shall do so if terns are actively foraging (e.g., searching and diving) within the work area. Should adverse impacts to terns occur (e.g., agitation or startling during foraging activities), the Biological Monitor shall be empowered to delay or halt construction, and shall do so until California least terns have left the project site."

Page 4.2-25

Global typographical change from California Least Tern to California least tern. The text in the DEIR has been revised as follows:

"California ~~Least Tern~~ least tern. Permanent loss of open water foraging area (a net loss of approximately 9,801 sf) resulting from the increase in bay cover could disturb the foraging ability of California least terns."

Page 4.2-25

The DEIR erroneously omitted the option to shallow-up deep, subtidal habitat to shallow, subtidal habitat to create more preferred foraging habitat. This option has been added to Mitigation Measure BIO-7 and to the Executive Summary as follows:

"BIO-7 Bay Coverage. Prior to construction ~~demolition~~ activities that would trigger off-site mitigation, the Project Applicant shall identify a mitigation site in San Diego Bay to meet a 1:1 mitigation ratio for approximately 7,969 ~~9,801~~ square feet of bay coverage impacts. Mitigation may ~~is likely to~~ comprise development of a fish enhancement structure in the form of a rock/rubble reef. However, other acceptable forms of mitigation include:

- Removal of similar structures within the bay (e.g., dock removal);
- Removal of upland fill from the bay;
- Creation of eelgrass habitat and/or reef structures in presently unvegetated bottom areas;
- Purchase of credits from a mitigation bank (for fill removal or enhancement such as eelgrass); ~~and~~
- Removal of non-functional riprap or debris from intertidal or shallow subtidal habitat in the bay to improve suitability for use by birds and fish; and
- Shallow-up deep, subtidal habitat to shallow, subtidal habitat to create more preferred foraging habitat."

Page 4.2-25

Additional clarifying text has been added to Mitigation Measure BIO-8 and to the Executive Summary as follows:

> **"BIO-8 Completion Report for Project Mitigation.** Within 30 days of project completion, but prior to any authorized use of the replacement pier, BAE Systems Environmental Manager or designee shall submit to the Port District and all affected resource and permitting agencies, a Completion Report detailing the completion and compliance with all mitigation measures contained in the proposed project's Mitigation Monitoring and Reporting Program (MMRP), including Mitigation Measures BIO-1 through ~~BIO-11~~BIO-14. The Completion Report shall contain all logs and related documentation as required by each mitigation measure identified in the project's MMRP."

Page 4.2-25

The CSLC has requested that a Marine Mammal and Turtle Contingency Plan also be required. It is understood that the Contingency Plan is intended to identify the actions taken in the event that a marine mammal or sea turtle is injured despite the efforts identified in the mitigation measures to stop work if either is present in the vicinity of the construction activity. The District finds that the mitigation measures as included in the Draft EIR reduce the impact to marine mammals and sea turtles to less than significant, and additional mitigation is not required under CEQA. However, the District also recognizes the role of the CSLC as a responsible agency for the project under CEQA, and the sensitivity of protected species resources. Therefore, **Mitigation Measure BIO-13** will be included in the Final EIR to require the preparation of a Marine Mammal and Turtle Contingency Plan prior to the initiation of pile driving activities.

> **"BIO-13 Marine Mammal and Turtle Contingency Plan.** Prior to the initiation of impact hammer pile driving activities, the project applicant shall retain a qualified biologist to prepare a Marine Mammal and Turtle Contingency Plan (Contingency Plan) to identify the actions taken in the event that, in spite of the requirement to stop work if a marine mammal or sea turtle is present in the vicinity of the construction activity, a marine mammal or sea turtle is injured. The Contingency Plan shall be submitted to the Port and National Marine Fisheries Service (NMFS) or other appropriate resource agency for review and approval and shall include but not be limited to notification "trees," identification of rescue centers, information for key contacts, and plans of action. The applicant shall ensure that this measure is implemented for the duration of impact hammer pile driving activity."

Page 4.2-28

Additional clarifying text has been added to Mitigation Measure BIO-9 and to the Executive Summary as follows:

> **"BIO-9 Eelgrass Boundaries.** Prior to construction, the boundaries of the eelgrass beds, located along the north/west and east/west bulkheads within the BAE Systems facility, shall be staked with ridged PVC markers or self-centering buoys visible at all tide heights. The project applicant ~~contractor~~ shall protect, replace, and maintain the markers/buoys as needed to ensure that they remain in place and properly stake the boundaries of the eelgrass beds."

Page 4.2-28

Additional clarifying text has been added to Mitigation Measure BIO-10 and to the Executive Summary as follows:

> **"BIO-10 Eelgrass Silt Curtain.** During shoreline work, the project applicant ~~contractor~~ will protect eelgrass with silt curtains deployed above the eelgrass and below the shoreline work area. The silt curtain will be designed to prevent drift ~~(for example, stretched between stakes so that the curtain is rigid)~~, so that impacts to eelgrass during installation are avoided."

Page 4.2-28

Additional clarifying text has been added to Mitigation Measure BIO-11 and to the Executive Summary as follows:

> **"BIO-11 Eelgrass Surveys.** The project applicant ~~contractor~~ shall conduct a pre-construction eelgrass survey in accordance with the requirements of the Southern California Eelgrass Mitigation Policy (SCEMP). A pre-construction eelgrass survey shall be completed by a qualified biologist within 60 days prior to initiation of demolition or construction activities at the site. This survey shall include both aerial ~~area~~ and density characterization of the beds. A post-construction survey shall be performed by a qualified biologist within 30 days following project completion to quantify any unanticipated losses to eelgrass habitat. Impacts shall then be determined from a comparison of pre- and post-construction survey results. Impacts to eelgrass, if any, would be mitigated through conformance with the SCEMP, which defines the mitigation ratio and other requirements to achieve mitigation for significant eelgrass impacts. If required following the post-construction survey, the SCEMP defined mitigation shall be developed, approved by the U.S. Army Corps of Engineers (USACE) and National Marine Fisheries Service (NMFS) ~~ACOE and NMFS~~, and implemented to offset losses to eelgrass."

Page 4.2-28

Additional best management practices for upland dredging operations were requested during the DEIR comment period. It is understood that adherence to applicable measures contained within the Shipyard Sediment Site Mitigation Monitoring and Reporting Plan would provide additional clarification for dredge bucket operations. The District finds that the mitigation measures as included in the Draft EIR reduce the impact to eelgrass to less than significant, and additional mitigation is not required under CEQA. However, the District also recognizes the sensitivity of protected species resources. Therefore, **Mitigation Measure BIO-14** will be included in the Final EIR to require adherence to applicable Shipyard Sediment Site MMRP requirements.

> **"BIO-14 Cleanup Abatement Order MMRP Compliance.** The project applicant shall ensure that construction activities within the scope of Shipyard Sediment Site Cleanup and Abatement Order (R-9-2012-0024) comply with all relevant Mitigation Monitoring and Reporting Program components of the Regional Water Quality Control Board's EIR."

Page 4.2-32

This text is clarified and updated in the Final EIR to read:

"The pier pilings removed from Pier 4 and Pier 5 could be placed, with District approval, to create reef habitat. It is estimated that the constructed reef would cover approximately 0.25 acre (10,890 sf). The reef at this location would be a crescent-shaped buttress style reef; as a result, there would be opportunity for eelgrass habitat creation, not related to project mitigation, shoreward of the reef. The second option would be to use the pier pilings removed from Pier 4 and Pier 5 to create an approximately 0.3 acre (10,019 sf) artificial reef adjacent to and just south of the planned Navy Pier 12 reef in San Diego Bay.

The reef at this location would be a stand-alone, high relief reef. Either of these options would meet and exceed a 1:1 mitigation requirement for the 7,969 ~~8,436~~ sf of project-related bay coverage. An additional restoration opportunity exists to place a series of double-T pier platforms from the existing Pier 4 at a shallow water offshore location to provide flat-top reef habitat. The location of these reefs would be along the northern edge of the District South Bay/Imperial Beach Planning District, offshore of Imperial Beach. This would be completed in addition to one of the two options described above and would provide opportunity for regional study ~~of efficacy~~ of such a reef enhancement program. As described above and in Mitigation Measure BIO-7, there are several options for addressing bay coverage impacts, including the purchase or transfer of credits, subject to the review and approval of the District and other agencies as appropriate, including but not limited to the RWQCB and USACE."

Page 4.2-38

Additional clarifying text has been added to Summary of Mitigation Measures section as follows:

"Mitigation measures pertaining to biological resources are included in Section 4.2.6, above. The full text of the measures is provided above and in Chapter 1.0 of this EIR. The titles of the measures are listed below.

BIO-1 Biological Monitoring for Special-Status Species. The project applicant ~~contractor~~ shall retain a qualified biologist to monitor project activities in accordance with the mitigation measures below.

BIO-2 Biological Monitoring of Impact Hammer Pile Driving. A qualified biologist shall conduct monitoring within 500 feet of any ~~active dredging or~~ impact ~~or vibratory~~ hammer pile driving.

BIO-3 Pile Driving. When performing impact hammer pile driving, the contractor shall commence work with one blow followed by a one-minute period of no pile driving.

BIO-4 Vessel Speed. Construction vessel traffic should not exceed the existing ambient speed limit for the shipyard.

BIO-5 Turbidity Curtain. Regardless of the timing of dredging, the project applicant ~~contractor~~ shall deploy a turbidity curtain around the dredging areas to restrict the surface visible turbidity plume.

BIO-6 Biological Monitoring During Breeding Season. A qualified Biological Monitor shall be retained by the project applicant ~~contractor~~ at its expense to conduct monitoring within 500 feet of any impact hammer pile driving construction activities.

BIO-7 Bay Coverage. The applicant shall implement a 1:1 mitigation ratio for approximately 7,969 square feet of bay coverage impacts. Final impact acreages shall be determined based on as-built drawings for the project, and impacts shall not exceed 10,000 square feet. The project applicant shall be responsible for securing all applicable permits for the mitigation.

BIO-8 Completion Report for Project Mitigation. The project applicant shall submit a completion report for project mitigation to the Port District and affected resource and permitting agencies.

BIO-9 Eelgrass Boundaries. The contractor ~~applicant~~ shall properly stake the boundaries of the eelgrass beds until the project applicant ~~District~~ certifies that all construction activities are complete.

BIO-10 Silt Curtain. During shoreline work, the project applicant ~~contractor~~ shall ensure that silt curtains ~~will protect eelgrass with non-drifting silt curtains~~ are deployed above the eelgrass and below the shoreline work area and designed to prevent drift to eelgrass during installation activities.

BIO-11 Eelgrass Surveys for SCEMP Compliance. The project applicant ~~contractor~~ shall retain a qualified biologist to conduct ~~eelgrass~~ pre- and post-construction eelgrass surveys in accordance with the requirements of the SCEMP.

BIO-12 *Caluerpa* Surveys. Pre-construction *Caluerpa taxifolia* survey~~s~~ will be conducted, and the provision of the *Caulerpa* Control Protocol (*CCP*) followed, to reduce risk of spread of *Caluerpa taxifolia*.

BIO-13 Marine Mammal and Turtle Contingency Plan. The project applicant shall retain a qualified biologist to prepare a Marine Mammal and Turtle Contingency Plan (Contingency Plan) for construction activities."

BIO-14 Cleanup Abatement Order MMRP Compliance. The project applicant shall ensure that construction activities within the scope of Shipyard Sediment Site Cleanup and Abatement Order (R-9-2012-0024) comply with all relevant Mitigation Monitoring and Reporting Program components of the Regional Water Quality Control Board's EIR."

Draft EIR Section 4.5 – Hazards and Hazardous Materials

Page 4.5-16

Additional clarifying text has been added to Mitigation Measure HAZ-1 and to the Executive Summary as follows:

"HAZ-1 Secondary Containment. Prior to the commencement of dredging, demolition or construction activity, the project applicant ~~contractor~~ shall install a secondary containment structure for the storage of all fuel, oil and other petroleum products, as required by the District Urban Stormwater Mitigation Plan. At all times during construction and operation of the project, the project applicant ~~contractor~~ shall house all oil and fuel in a secondary containment structure to ensure that spilled or leaked oil or fuel will be prevented from entering the water column."

Page 4.5-18

Additional clarifying text has been added to Mitigation Measure HAZ-2 and to the Executive Summary as follows:

"HAZ-2 Dredging Management Plan. Prior to dredging operations, BAE Systems shall prepare a Dredging Management Plan (DMP) for review and approval by the Army Corps of Engineers (USACE). The project applicant ~~contractor~~ shall implement the measures listed in the DMP during dredging operations. The DMP shall contain standard operating procedures for the project to assist the dredge contractor in preventing accidental spills and providing the necessary guidelines to follow in case of an oil or fuel spill. Typical

BMPs for equipment failure or repair shall be identified in the DMP and shall include, but not be limited to:

- Communication to project personnel;
- Proper signage and/or barriers alerting others of potentially unsafe conditions;
- All construction repair work to be conducted on land and not over water;
- Repair work involving use of liquids to be performed with proper spill containment equipment (e.g., spill kit); and
- A contingency plan identifying availability of other equipment or subcontracting options.

In addition, the DMP shall include, at a minimum, the following measures to prevent accidental oil/fuel spills during construction activities:

- Personnel involved with dredging and handling the dredged material shall be given training on their specific task areas, which will be identified in the Health and Safety Plan (H&S Plan). The training shall be carried out by BAE Systems per OSHA requirements. The training materials include but shall not be limited to the following:
    - Potential hazards resulting from accidental oil and/or fuel spills; and
    - Proper dredging equipment operation.
- As an operational control element, all oil and fuel shall be housed in a secondary containment structure to ensure that any spill or leakage is prevented from entering the water column.
- Required instrumentation to avoid spillage of dredging material shall be identified for each piece of equipment used during dredging operations.
- All equipment shall be inspected by dredge contractor personnel before starting the shift. These inspections are intended to identify typical wear or faulty parts that may contain oil or fuel.
- Personnel shall be required to visually monitor for oil or fuel spills during construction activities.
- In the event that a sheen or spill is observed, the equipment shall be immediately shut down and the source of the spill identified and contained. Additionally, the spill shall be reported to the applicable agencies presented in the DMP.
- All personnel associated with dredging activities will be trained as to where oil/fuel spill kits are located, how to deploy the oil-absorbent pads, and proper disposal guidelines. The dredging barge shall have sufficient quantity of oil/fuel spill kits on board to allow for quick and timely implementation of spill containment.
- Barge load limits and loading procedures will be identified, and the appropriate draft level will be marked on the materials barge hull.

- Water discharge (decant water from sediment dredged in areas designated ~~destined~~ for upland disposal and storm water) to the San Diego Bay is ~~are~~ prohibited."

Page 4.5-19

Additional clarifying text has been added to Mitigation Measure HAZ-3 and to the Executive Summary as follows:

"HAZ-3 Contingency Plan. The project applicant ~~contractor~~ shall prepare and submit to the USACE for approval a Contingency Plan prior to the initiation of dredging and implemented for the duration of the dredging activity, to address equipment and operational failures that could occur during dredging operations. The Contingency Plan shall include, but shall not be limited to the following measures to prevent a release of hazardous materials in the event of equipment failure, repair, or silt curtain breach:

- Procedures for communication to project personnel;
- Installation of proper signage and/or barriers alerting others of potentially unsafe conditions;
- Specification for repair work to be conducted on land and not over water;
- Identification of proper spill containment equipment (e.g., spill kit);
- Identification of other equipment or subcontracting options;
- Emergency procedures to follow in the event of equipment failure or release;
- Incident reporting and review procedure to evaluate the causes of an accidental release and steps to avoid further incidents;
- Response procedures in the event of barge overfill; and
- Procedures for prompt notification of the District and all other regulatory agencies."

Page 4.5-20

Additional clarifying text has been added to Mitigation Measure HAZ-4 and to the Executive Summary as follows:

"HAZ-4 Health and Safety Plan. The project applicant ~~contractor~~ shall prepare and submit to the USACE for approval a Health and Safety Plan prior to the initiation of dredging and implemented for the duration of the dredging activity. The H&S Plan will be prepared in general accordance with Federal Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response Standard (29 Code of Federal Regulations [CFR] 1910.120) and Title 8 California Code of Regulations (CCR) Section 5192. The H&S Plan will be reviewed and approved by a Certified Industrial Hygienist ~~approved by the USACE~~ and at the project applicant ~~contractor~~'s expense. The H&S Plan will include the following requirements at a minimum:

- Training for operators to prevent and respond to releases;

- Identification of appropriate Personal Protection Equipment for all construction activities, including personal floatation devices, hard hats, and work shoes/clothing;
- Training in the safe operation of cranes, barges, tugs, and support craft;
- Site evacuation and emergency first aid response; and
- Documentation that requires that health and safety procedures have been implemented."

Page 4.5-21

Additional clarifying text has been added to Mitigation Measure HAZ-5 and to the Executive Summary as follows:

"HAZ-5 Communication Plan. Prior to the initiation of dredging activities, the project applicant ~~contractor~~ shall prepare and submit to the USACE ~~for approval~~ a Communication Plan and operational guidelines for communications between the U.S. Coast Guard and all vessel operators to ensure the safe movement of project vessels from the dredge to the unloading area. Features of the Communication Plan will include at a minimum:

- Identification of vessel speed limitations (e.g., wake/no wake);
- Notification to project personnel using air horns as necessary; and
- Staging the dredge activity to control the amount of material being handled, dewatered, and transported to reduce the potential for accidents or incidents related vessel operation."

Page 4.5-22

Additional clarifying text has been added to Mitigation Measure HAZ-6 and to the Executive Summary as follows:

"HAZ-6 Upland Dredging Operation Practices. During dredging operations, BAE Systems shall ensure that the dredge contractor is implementing standard BMPs for minimizing resuspension and spillage through contractor contract specifications. Such BMPs shall include, but not be limited to, the following:

- The contractor shall remove dredge material and not stockpile material on the bottom of the San Diego Bay floor, and shall not sweep or level the bottom surface with the bucket.
- The contractor shall not overfill the digging bucket because overfill results in material overflowing back into the water.
- The contractor shall deploy inner- and outer-boundary floating silt/turbidity curtains for the dredge areas subject to upland disposal. These two curtains (also referred to as "double" silt/turbidity curtains) will be located around the dredge activity area at all times and around the immediate dredge barge/bucket area. These double silt/turbidity curtains shall be utilized for containment of the dredge area, while configurations, technologies, and actual locations of silt curtains in relation to the dredge barge shall be finalized during the design phase of the project.
- Contractors shall control the swing radius of the unloading equipment within the silt curtain and to reduce the amount of sediment spillage in the dredge area.

- The contractor shall not overfill the material barge to a point where overflow or spillage could occur. Each material barge shall be marked in such a way to allow the operator to visually identify the maximum load point. The marking should allow sufficient interior freeboard to prevent spillage in rough water such as ship wakes during transit. Initiating the material barge marking shall minimize impact of load spillage during transit to the ocean disposal site.
- The contractor shall not use weirs as a means to dewater the scow and shall allow additional room for sediment placement. Preventing this action shall minimize the introduction of turbidity to the water column.
- The contractor shall place material in the material barge such that splashing or sloshing does not occur, which could send sediment back into the water. Splashing can be controlled by restricting the drop height from the bucket.
- If the use of a grate to collect debris is required, the contractor shall not allow material to pile up on the grate and flow or slip from the grate back into the water. The debris scalper shall be positioned in such a way as to be totally contained on the shore side of the unloading operations. The dredge operator shall visually monitor for debris build-up and alert the support personnel on the barge to assist in clearing the debris, as necessary. Debris that is derived from dredging activities shall be removed from the grate by the environmental clamshell bucket and placed in a contained area on the dredge barge or in a second material barge for subsequent removal and disposal.
- The contractor shall restrict barge movement and work boat speeds (i.e., reducing propeller wash) in the dredge area.
- For dredged sediment subject to upland disposal, the contractor shall reduce hardscape spillage that could occur during the transfer from excavator arm onto transport vehicles by sloping the hardscape near the spill plate into a collection sump or alternative means (e.g., pier containment) to allow water and fluidized mud that may fall to be collected.
- For dredged sediment subject to upland disposal, the contractor shall use a power wash unit to reduce impacts related to spillage from the excavator arm onto transport vehicles. In the event that sediment is spilled onto the transport vehicle, it can be quickly washed into the collection sump.
- Additional requirements as referenced in Mitigation Measure BIO-14 shall be applied to upland dredging activities as applicable."

Page 4.5-25

Additional clarifying text has been added to Mitigation Measure HAZ-8 and to the Executive Summary as follows:

> **"HAZ-8 Dewatering.** At all times during construction and operation of the proposed project, the project applicant ~~contractor~~ shall ensure that the decant from dredged sediments subject to upland disposal and storm water containers are sealed when not in use to avoid overflowing during a storm event. This would involve the decant and/or storm water being collected in a sump in the operation area, pumped to aboveground tanks, and disposed of either within the sanitary sewer or off site. The storage areas shall be surrounded by a curb, dike, berm, or some other type of secondary containment system. All paved storage areas shall be free of cracks and gaps, and shall be able to contain leaks and overflows until they can be addressed."

Page 4.5-33

Additional clarifying text has been added to Summary of Mitigation Measures section as follows:

"Mitigation measures pertaining to hazards and hazardous materials are included in Section 4.5.5, above. The full text of the measures is provided above and in Chapter 1.0 of this EIR. The titles of the measures are listed below.

- **HAZ-1: Secondary Containment.** Prior to the commencement of dredging, demolition or construction activity, the project applicant ~~contractor~~ shall install a secondary containment structure for the storage of all fuel, oil and other petroleum products.

- **HAZ-2: Dredging Management Plan.** The project applicant ~~contractor~~ shall prepare a Dredging Management Plan (DMP) for review and approval by the USACE.

- **HAZ-3: Contingency Plan.** The project applicant ~~contractor~~ shall prepare and submit to the USACE for approval a Contingency Plan to address equipment and operational failures prior to the initiation of dredging activities.

- **HAZ-4: Health and Safety Plan.** The project applicant ~~contractor~~ shall prepare and submit to the USACE for approval a Health and Safety Plan prior to the initiation of dredging and implemented for the duration of the dredging activity.

- **HAZ-5: Communication Plan.** The project applicant ~~contractor~~ shall prepare and submit to the USACE for approval a Communication Plan and operational guidelines for communications between the U.S. Coast Guard and all vessel operators to ensure the safe movement of project vessels from the dredge to the unloading area.

- **HAZ-6: Dredge Practices.** The project applicant shall require contractors through construction contract specifications that identified dredge practices are implemented.

- **HAZ-7: Binding Agents.** The project applicant shall specify through construction contract specifications, that pozzolonic agents shall be applied through a wet application blending process.

- **HAZ-8: Dewatering.** The project applicant ~~contractor~~ shall ensure that the decant and storm water containers are sealed when not in use to avoid overflowing during a storm event.

- **HAZ-9: Haul Trucks.** The project applicant shall require the contractor to accept the following construction contraction specifications regarding the amount and disposition of hauls trucks entering and leaving the project site during dredging activities.

- **HAZ-10: Completion Report for Project Mitigation.** The project applicant shall submit a completion report for project mitigation to the Port District and affected resource and permitting agencies."

Draft EIR Section 8.0 – References

Page 8-1

The following references have been added to Section 8.0:

California State Lands Commission. 2012. http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp?frmIncrement=20&frmStartRow=60&frmQuery=san+diego&holdSearchValue=County&frmCounty=x&frmOrderBy=%5Bship%27s+name%5D&frmOrderDirection=ASC.

US Fish and Wildlife Service (2006) California least tern, *Sternula antillarum browni*, 5-year review summary and evaluation. U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, Carlsbad, California.

Pondella, D. J. II, L. G. Allen, M. T. Craig, and B. Gintert (2006) Evaluation of Eelgrass Mitigation and Fisheries Enhancement Structures in San Diego Bay, California. Bul. Mar. Sci. 78(1): 115-131.

Section 4.0

Public Review Distribution List

The Draft EIR for the proposed BAE Systems Pier 4 Replacement Project was made available for public review on May 7, 2012, for the standard 45-day public review period that concluded on June 20, 2012. Below is a listing of those agencies and organizations to whom a copy of the NOP was sent:

4.1 Federal Agencies

- U.S. Fish & Wildlife Service
- U.S. Army Corps of Engineers
- U.S. Department of the Navy – Southwest Region
- U.S. Coast Guard Marine Safety Office

4.2 State Agencies

- California State Lands Commission
- California Department of Fish and Game
- California Coastal Commission
- State Water Resources Control Board
- Caltrans District 11
- California Department of Boating and Waterways
- California Air Resources Board

4.3 Local Agencies

- San Diego County Water Authority

4.4 Organizations

- Accessible San Diego
- San Diego Audubon Society
- San Diego Coastkeeper
- San Diego County Archaeological Society, Inc
- City of San Diego Central Library
- City of San Diego Library – Logan Heights Branch

4.5 Other Interested Parties

- San Diego Port Tenants Association
- Hogan Guiney Dick, LLP

In addition, the District sent the following agencies and organizations a postcard noticing the availability of the Draft EIR. The District also sent a postcard noticing the availability of the Draft EIR to other interested parties as well as surrounding property owners and occupants.

4.6 Federal Agencies

- U.S. Environmental Protection Agency
- U.S. Department of Justice
- U.S. Navy
- U.S. Department of Commerce - NOAA

4.7 State Agencies

- California Regional Water Quality Control Board – San Diego Region
- California Regional Water Quality Control Board – Office of Enforcement
- California State Lands Commission
- Office of Planning and Research
- Department of Toxic Substances Control
- Caltrans Division of Aeronautics
- California Native American Heritage Commission
    - Barona Group of the Captain Grande
    - La Posta Band of Mission Indians
    - San Pasqual Band of Mission Indians
    - Sycuan Band of the Kumeyaay Nation
    - Viejas Band of Kumeyaay Indians
    - Kumeyaay Cultural Historic Committee
    - Campo Band of Mission Indians
    - Jamul Indian Village
    - Kumeyaay Diegueno Land Conservancy
    - Inter-Tribal Cultural Resource Protection Council
    - Kumeyaay Cultural Repatriation Committee
- California Integrated Water Management Board
- California Highway Patrol
- California Department of Parks and Recreation

4.8 Local Agencies

- San Diego County Regional Airport Authority
- County of San Diego
- City of San Diego Storm Water Pollution Prevention Division
- City of Chula Vista
- City of Coronado

- City of Imperial Beach
- City of National City
- City of San Diego

4.9 Organizations

- Citizens Coordinate for Century 3
- Downtown San Diego Partnership
- Environmental Health Coalition
- I Love a Clean San Diego
- Save Our Heritage Organization
- Sierra Club – San Diego Chapter
- Surfrider Foundation – San Diego Chapter

4.10 Other Interested Parties

- SDG&E
- San Diego Union Tribune
- Schwartz Semerdijian Haile Ballard & Cauley LLP
- R.E. Staite Engineering, Inc.
- Allen Matkins Leck Gamble Mallory & Natsis LLP
- Gordon & Rees LLP
- Latham & Watkins LLP
- DLA Piper LLP
- General Dynamics NASSCO
- Barrio Station
- Sempra Energy/San Diego Gas & Electric
- National Steel and Shipbuilding Company
- CP Kelco U.S. Inc.
- Atlantic Richfield Company
- Chevron USA Inc.
- Kelco Company
- SWM Holdings Inc.

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Section 5.0

Response to Comments

Under CEQA, an agency must solicit and respond to comments from the public and from other agencies concerned with the project. The Draft EIR (Draft EIR) was made available by the San Diego Unified Port District (District) for public review from May 7, 2012 through June 20, 2012. The Draft EIR has undergone an extensive public and agency review process. Copies of the Draft EIR were distributed to all Responsible Agencies and to the State Clearinghouse in addition to various public agencies, organizations, and interested individuals. Copies of the Draft EIR were also made available for public review at the District Clerk's office and on the District's website.

Four comment letters were received during the public review period, and one comment letter was received after the close of the public review period. Comments were received from four State agencies and one organization. All five letters have been responded to within this document.

Section 15088 of the State CEQA Guidelines, Evaluation of and Response to Comments, states:

a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The lead agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.

b) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, major environmental issues raised when the lead agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail, giving the reasons that specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.

c) The response to comments may take the form of a revision to the draft EIR or may be a separate section in the final EIR. Where the response to comments makes important changes in the information contained in the text of the draft EIR, the lead agency should either:

    1. Revise the text in the body of the EIR; or

    2. Include marginal notes showing that the information is revised in the responses to comments.

Information provided in Section 3.0 of the Final EIR clarifies, amplifies, or makes minor modifications to the Draft EIR. No significant changes have been made to the information contained in the Draft EIR as a result of the responses to comments, and no significant new information has been added that would require recirculation of the document.

5.1 LIST OF PERSONS, ORGANIZATIONS, AND PUBLIC AGENCIES COMMENTING ON THE Draft EIR

The persons, organizations, and public agencies that submitted comments regarding the Draft EIR through June 22, 2012, are listed below. As previously stated, a total of five comment letters were received. Four of the comment letters received were from State, regional, or local agencies. One comment letter was received from a local organization. Each comment letter received is indexed with a number below.

A **California Native American Heritage Commission (June 4, 2012)**
Dave Singleton, Program Analyst

B **California Department of Toxic Substances Control (June 14, 2012)**
Al Shami, Brownfields and Environmental Restoration Program Project Manager

C **California State Lands Commission (June 18, 2012)**
Cy R. Oggins, Division of Environmental Planning and Management, Chief

D **San Diego Coastkeeper (June 20, 2012)**
Jill Witkowski, Legal Clinic Director

E **United States Fish and Wildlife Service (June 22, 2012)**
Karen Goebel, Assistant Field Supervisor

5.2 FORMAT OF RESPONSES TO COMMENTS

Individual comments within the body of each letter have been identified and numbered. A copy of each comment letter and the District's responses are included in this section. Brackets delineating the individual comments and an alphanumeric identifier have been added to the right margin of the letter. Responses to each comment identified are included on the page(s) following each comment letter. Responses to comments were sent to the agencies that provided comments.

5.3 LETTER A: CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION

Commenter: Dave Singleton, Program Analyst

Date: June 4, 2012

COMMENTS

Letter A

STATE OF CALIFORNIA Edmund G. Brown, Jr., *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

June 4, 2012

Mr. Eric Muñoz, Environmental & Land Use Manager
San Diego Unified Port District (SDUPD)
3165 Pacific Highway
San Diego, CA 92012

Re: SCH#2012031024; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the **"BAE SYSTEMS PIER 4 REPLACEMENT PROJECT;"** located in the San Diego Unified Port District; San Diego County, California.

Dear Mr. Muñoz:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604).

A-1

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC did conduct a Sacred Lands File (SLF) search within the 'area of potential effect (APE} and Native American cultural resources were not identified. However, this are is known to the NAHC to be culturally sensitive; so carefully planning is advised.

A-2

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

A-3

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you

A-4

RESPONSES

RESPONSE TO LETTER A

California Native American Heritage Commission

Commenter: Dave Singleton, Program Analyst

Date: June 4, 2012

Response to Comment A-1. The comment states that the Native American Heritage Commission (NAHC) is the State "trustee agency" pursuant to Public Resources Code Section 21070 for the protection and preservation of the State's Native American resources. The comment also states that the letter contains state and federal statutes relating to Native American historic properties of religious and cultural significance. The comment is introductory in nature and outlines the NAHC's authority and role as a commenting agency. Since the comment does not raise any environmental issue, no further response is required.

Response to Comment A-2. The comment states that CEQA requires that any project that causes a substantial adverse change in the significance of a historical resource, which includes archaeological resources, is a "significant effect" requiring the preparation of an EIR. A Draft EIR was prepared for the proposed project and circulated for public review on May 7, 2012. The comment further states that the NAHC Sacred Lands File (SLF) search found that no Native American cultural resources were identified within the project area. The comment notes that the area is known to the NAHC to be culturally sensitive.

Based on the Cultural Resources Assessment prepared for the proposed project, the site contains three potentially historic features: Building 40, Pier 4, and Pier 5, which were recorded and evaluated for significance in accordance with CEQA. As stated in the Draft EIR (Draft EIR pg. 6-10), no changes to Building 40 are proposed as part of the project but is included as part of the cultural resources report as it is associated with Piers 4 and 5. Based on the study, it was determined that these features were not considered to be significant. As identified in the Draft EIR (Draft EIR pg. 6-10), no archaeological resources were identified in the project area. In addition, no archaeological resources were identified in the project area during the pedestrian survey. The project is on an artificial landform area created by bay infill, has been severely disturbed by development, and has been completely obscured by built environment and pavement, thus severely limiting the potential for any buried resources and precluding observation of any remnant surface cultural deposits. Consequently, implementation of the proposed project is not expected to affect significant cultural resources.

Response to Comment A-3. The comment states that NAHC Sacred Sites are confidential and exempt from the Public Records Act pursuant to California Government Code Section 6254. The District acknowledges the sensitivity and confidentiality of the information contained in the cultural resources report. No records maps have been made public nor will they be made public in association with the District's consideration of the proposed project.

Response to Comment A-4. The comment letter states that early consultation with Native American Tribes in the area of the project site is the best way to avoid unanticipated discoveries once a project is underway. The letter includes a list of Native American contacts and recommends obtaining their recommendations concerning the proposed project. As discussed in Response to Comment A-2, the project site has a very low likelihood to contain Native American resources due to the existing marine industrial use (characterized by ship repair uses). In addition, none of the identified features within the project site is historic or eligible for listing in the National Register of Historic Places (National Register). In addition, Native American consultation is required when there is the adoption or substantial amendment of general plans, specific plans, or if there is a dedication of open space for the purpose of protecting cultural places. The proposed project is a pier replacement project and does not involve the amendment of a general plan, specific plan, or the dedication of open space. Therefore, Native American consultation is not required.

COMMENTS

Letter A

make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests cooperation from other public agencies in order that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources. A-4

Furthermore, the NAHC if the proposed project is under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.' A-5

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity. A-6

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for inadvertent discovery of human remains mandate the processes to be followed in the event of a discovery of human remains in a project location other than a 'dedicated cemetery'. A-7

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects. A-8

Finally, when Native American cultural sites and/or Native American burial sites are prevalent within the project site, the NAHC recommends 'avoidance' of the site as referenced by CEQA Guidelines Section 15370(a). A-9

2

RESPONSES

Response to Comment A-5. The comment states that consultation with Tribes and interested Native American consulting parties on the NAHC list should be conducted in compliance with the requirements of federal National Environmental Policy Act (NEPA), Sections 106 and 4(f) of the National Historic Preservation Act (NHPA), and the Native American Grave Protection and Repatriation Act (NAGPRA), as appropriate. As discussed in Response to Comment A-2, there is a very low likelihood that the project site contains Native American resources. In addition, none of the identified features within the project site is historic or eligible for listing in the National Register. Therefore, consultation was not initiated for the proposed project. It is further noted that the District is conducting an environmental review pursuant to the requirements of CEQA. The District will make the Final EIR, including the NAHC comment letter, available to any federal permitting agency for the project.

Response to Comment A-6. This comment reiterates the confidentiality of Native American resources. As discussed in Response to Comment A-2, no Native American resources have been identified in the project area.

Response to Comment A-7. The comment identifies State laws regarding the accidental discovery of human remains. As identified in Response to Comment A-2, no archaeological resources were identified in the pedestrian survey. In addition, the project is on an artificial landform area created by bay infill, has been severely disturbed by development, and has been completely obscured by built environment and pavement, thus eliminating the potential for any buried resources and precluding observation of any remnant surface cultural deposits. Therefore, the project site presents little to no potential for the discovery of human remains. However, in the unlikely event that human remains are encountered during project implementation, the County Coroner and the District would be notified immediately, and no further disturbance would occur until the County Coroner makes a determination of origin and disposition. If the remains are determined to be Native American, the County Coroner would notify the NAHC, which will determine and notify the most likely descendant (MLD) per Public Resources Code Section 5097.98, California Government Code Section 27491, and Health and Safety Code 7050.5 requirements.

Response to Comment A-8. This comment refers to the NAHC's recommendations for Native American consultation in the event that Native American resources have the potential to be affected. As stated in Response to Comment A-2, Native American consultation has not been initiated for the proposed project because there is a very low likelihood that the project site contains Native American resources.

Response to Comment A-9. This comment recommends avoidance in the event that Native American cultural sites and/or Native American burial sites are prevalent within the project site. The project site is an existing active shipyard. As stated in Response to Comment A-2, there is a very low likelihood that the project site contains Native American resources.

COMMENTS

Letter A

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

A-10

RESPONSES

Response to Comment A-10. The comment is informational in nature and provides the commenter's contact information in the event that there are additional questions regarding the comments made on the project. The NAHC's closing comment is noted, and no further response is required.

COMMENTS

Letter A

Native American Contacts
San Diego County
June 4, 2012

Barona Group of the Capitan Grande
Edwin Romero, Chairperson
1095 Barona Road Diegueno
Lakeside , CA 92040
sue@barona-nsn.gov
(619) 443-6612
619-443-0681

Viejas Band of Kumeyaay Indians
Anthony R. Pico, Chairperson
PO Box 908 Diegueno/Kumeyaay
Alpine , CA 91903
jrothauff@viejas-nsn.gov
(619) 445-3810
(619) 445-5337 Fax

La Posta Band of Mission Indians
Gwendolyn Parada, Chairperson
PO Box 1120 Diegueno/Kumeyaay
Boulevard , CA 91905
gparada@lapostacasino.
(619) 478-2113
619-478-2125

Kumeyaay Cultural Historic Committee
Ron Christman
56 Viejas Grade Road Diegueno/Kumeyaay
Alpine , CA 92001
(619) 445-0385

San Pasqual Band of Mission Indians
Allen E. Lawson, Chairperson
PO Box 365 Diegueno
Valley Center, CA 92082
allenl@sanpasqualband.com
(760) 749-3200
(760) 749-3876 Fax

Campo Band of Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 Diegueno/Kumeyaay
Campo , CA 91906
chairgoff@aol.com
(619) 478-9046
(619) 478-5818 Fax

Sycuan Band of the Kumeyaay Nation
Danny Tucker, Chairperson
5459 Sycuan Road Diegueno/Kumeyaay
El Cajon , CA 92019
ssilva@sycuan-nsn.gov
619 445-2613
619 445-1927 Fax

Jamul Indian Village
Chairperson
P.O. Box 612 Diegueno/Kumeyaay
Jamul , CA 91935
jamulrez@sctdv.net
(619) 669-4785
(619) 669-48178 - Fax

A-11

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012031024; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the BAE SYSTEMS PIER 4 REPLACEMENT PROJECT. located in the San Diego Port District; San Diego County, California.

RESPONSES

Response to Comment A-11. This comment provides a list of Native American Contacts within San Diego County. The contacts will be included as part of the Final EIR notification list.

COMMENTS

Letter A

Native American Contacts
San Diego County
June 4, 2012

Kumeyaay Diegueno Land Conservancy
M. Louis Guassac
P.O. Box 1992 Diegueno/Kumeyaay
Alpine , CA 91903
guassacl@onebox.com
(619) 952-8430

Inter-Tribal Cultural Resource Protection Council
Frank Brown, Coordinator
240 Brown Road Diegueno/Kumeyaay
Alpine , CA 91901
frankbrown6928@gmail.com
(619) 884-6437

Kumeyaay Cultural Repatriation Committee
Bernice Paipa, Vice Spokesperson
1095 Barona Road Diegueno/Kumeyaay
Lakeside , CA 92040
(619) 478-2113
(KCRC is a Colation of 12
Kumeyaay Governments

A-11

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012031024; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the BAE SYSTEMS PIER 4 REPLACEMENT PROJECT. located in the San Diego Port District; San Diego County, California.

RESPONSES

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COMMENTS

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5.4: LETTER B: DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Commenter: Al Shami, Project Manager

Date: June 14, 2012

COMMENTS

Letter B

Department of Toxic Substances Control

Deborah O. Raphael, Director
5796 Corporate Avenue
Cypress, California 90630

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

RECEIVED
LAND USE PLANNING
JUN 15 2012

June 14, 2012

Mr. Eric Munoz
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92012

DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) DOCUMENT TRANSMITTAL FOR BAE SYSTEMS PIER 4 REPLACEMENT PROJECT (SCH# 2012031024)

Dear Mr. Munoz:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Preparation Report for the above-mentioned project. The following project description is stated in your document: "The goal of the Pier 4 Replacement Project is to replace an existing, aging (52-year-old) pier with a newer, more modern pier that will allow BAE Systems to maintain and repair the current fleet of military and commercial ships, including the littoral combat ship (LCS), the first of a new class of surface combat ships for the U.S. Navy.

The proposed project is generally located within a private shipyard (BAE Systems facility) located along the eastern shoreline of central San Diego Bay at 2205 East Belt Street in the City of San Diego, California. The proposed project proposes landside and waterside redevelopment of the Pier 4 site within the existing BAE Systems facility located in the Port of San Diego. The proposed landside improvements include: removal of existing revetments along the shoreline, relocation of shoreline infrastructure (e.g., existing waterfront storm water collection tanks), and the construction of three new bulkhead sections. The proposed waterside improvements include the demolition of the existing Pier 4 and Pier 5 structures at the BAE Systems facility, removal of the five dry dock mooring dolphins, underwater dredging, and the construction of a replacement pier and a mooring dolphin. The project would remove approximately 20,269 square feet (sf) of marine structures (piers and dolphins) and would result in approximately 26,944 sf of new marine features. The project would also result in the dredging of approximately 41,908 cubic yards (cy) of bay sediment in three phases. Phase A would include the dredging of 28,700 cy of bay sediment of which 27,500 cy (subphase A1) would be evaluated for ocean disposal and 1,200 cy (subphase A2) would be evaluated for upland disposal. Phase B would include the dredging of 8,958 cy of bay sediment of which 6,952 cy (subphase B1) would be evaluated for ocean disposal and 2,006 cy

B-1

RESPONSES

RESPONSE TO LETTER B

Department of Toxic Substances Control

Commenter: Al Shami, Project Manager

Date: June 14, 2012

Response to Comment B-1. This comment acknowledges receipt of the Notice of Preparation for the proposed project by the Department of Toxic Substances Control (DTSC). In addition, this comment summarizes the project description identified in the Draft EIR. Since the DTSC's introduction in this comment does not raise any environmental issue, no further response is required.

COMMENTS

Letter B

(subphase B2) would be evaluated for upland landfill disposal. Phase C would include the dredging of 4,250 cy of bay sediment that would be evaluated for upland landfill disposal. Subphase B2 and Subphase C are also within the Cleanup and Abatement Order (CAO) R9- 2012-0024 remedial footprint. These two subphases total approximately 0.70 acre". B-1

Based on the review of the submitted document DTSC has the following comments:

1) The EIR should evaluate whether conditions within the project area may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:

- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
- Envirostor (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).
- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA. B-2
- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
- GeoTracker: A List that is maintained by Regional Water Quality Control Boards.
- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

2) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government B-3

RESPONSES

Response to Comment B-2. This comment provides a list of databases and states that the EIR should evaluate whether conditions within the project area may pose a threat to human health or the environment. A comprehensive review of available environmental databases was performed by EDR for the adjacent Shipyard Sediment Project including Federal, State, and local hazardous waste records in the vicinity of the Pier 4 Replacement project site. There are 13 sites with historical Cortese listings within 0.25 mile of the project site, including:

- BAE Systems San Diego Ship Repair;
- Continental Maritime;
- ISP Alginates Inc.;
- Silvergate Power Plant;
- Chevron Service Station, 2351 Harbor Drive;
- Arco San Diego Terminal, 2295 Harbor Drive;
- Pro-Line Paints Company;
- IMS Recycling Services, Inc.;
- Markel Johnson, 2697 Main Street;
- Eddie S. Specialists;
- Giolzetti and Lulue;
- Nex Gas 28th Street; and
- NASSCO Building 70.

These sites are not included in the active Cortese list. This historical list documents sites with historical releases that have been evaluated or remediated such that they are no longer believed to be a source of potential impacts. As such, these sites are not considered to have the potential to affect the proposed project. In addition, the Draft EIR has evaluated conditions within the project area to identify specifically any hazards to human health or the environment. Specifically, Draft EIR Section 4.5 – Hazards and Hazardous Materials (Draft EIR pg. 4.5-1) provides analysis on the potential for hazards to the public or environment through routine transport, use, or disposal of hazardous materials; through upset or accident conditions; hazards from being located within a site that is included on a list of hazardous material sites; aviation hazards; or wildfire hazards. As stated in the Draft EIR, the area that overlaps with the Cleanup Abatement Order (CAO) area is listed on the list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and is subject to the requirements and standards identified under the San Diego Regional Water Quality Control Board (RWQCB) CAO No. R9-2012-0024 (Draft EIR pg. 4.5-28).

Response to Comment B-3. As previously stated, a portion of the dredging area is subject to San Diego RWQCB CAO No. R9-2012-0024. In addition, Draft EIR Section 4.5 – Hazards and Hazardous Materials (Draft EIR pg. 4.5-1) provides a discussion of the investigation and remediation of the dredging area within the CAO area. While it is noted that the DTSC can provide an oversight agreement, the CAO and remediation of the area that is contaminated are currently under the oversight of the San Diego RWQCB.

COMMENTS

Letter B

agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents. B-3

3) Any environmental investigations, sampling and/or remediation for a site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table. All closure, certification or remediation approval reports by regulatory agencies should be included in the EIR. B-4

4) If buildings, other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should also be conducted for the presence of other hazardous chemicals, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies. B-5

5) Future project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination. B-6

6) Human health and the environment of sensitive receptors should be protected during any construction or demolition activities. If necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment. B-7

7) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA. B-8

RESPONSES

Response to Comment B-4. The comment states any environmental investigations, sampling and/or remediation should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The comment also states that the findings of any investigations should be summarized in the document and that all closure, certification or remediation approval reports by regulatory agencies should be included in the EIR.

As previously identified, the construction phase of the proposed project would require dredging within five different areas in the San Diego Bay. Of these five areas, two dredging phases, Sub-Phase B2 and Sub-Phase C, are also within the CAO R9-2012-0024 remedial footprint. CAOs are issued under the authority of the California Water Code (Section 13304) (Draft EIR pg. 4.6-31). CAO R9-2012-0024 is for a larger area in the San Diego Bay known as the Shipyard Sediment Project site. Under CAO R9-2012-0024, the San Diego RWQCB had determined that several agencies and/or parties caused or permitted the discharge of waste to the Shipyard Sediment Project site resulting in the accumulation of waste in the marine sediment. The contaminated marine sediment has caused conditions of contamination or nuisance in San Diego Bay that adversely affect aquatic life, aquatic-dependent wildlife, human health, and San Diego Bay beneficial uses. The San Diego RWQCB determined that issuance of a CAO was the appropriate regulatory tool to use for correcting the impairment at the Shipyard Sediment Project site. Substantial sampling and analysis have been conducted for the proposed project as well as adjacent properties, including the testing of the dredging areas that overlap the CAO remedial footprint to determine suitability for upland or ocean disposal.

The findings of the investigations for preliminary testing of sediment not within the CAO footprint have been summarized in the Hazards and Hazardous Waste section of the Draft EIR. Since the remediation of the area is ongoing, there are no closure documents or reports that can be included as part of the EIR. Furthermore, background sediment levels within the CAO have been provided as part of the Shipyard Sediment Site Cleanup Project and Tentative Cleanup and Abatement Order No. R9-2011-0001, which has been incorporated as reference to the Draft EIR (Draft EIR pg. 2-7). It is anticipated that the San Diego RWQCB, as the lead agency for the CAO, would coordinate with any applicable agencies, such as DTSC, during the implementation of the CAO.

Response to Comment B-5. The comment states that if structures, asphalt, or concrete paved areas are planned to be demolished, proper precautions should be taken during demolition activities and any identified contaminants remediated in compliance with California environmental regulations and policies. As indicated in Draft EIR Section 4.10.5.7, "…all uses within the District that generate waste (which includes the proposed project area) are required to coordinate with a waste hauler to develop collection of recyclable materials for the project on a common schedule as set forth in applicable local, regional, and state programs. Additionally, all development within the District is required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, State, and Federal solid waste disposal standards, thereby ensuring that the solid waste stream to the Otay Sanitary Landfill is reduced and no hazardous waste is received in accordance with existing regulations" (Draft EIR pg. 4.10-19). In the event that contaminants are identified, these contaminants shall be treated in accordance with local, State, and Federal laws and regulations. In addition, project-related demolition does not include the demolition of any buildings. Therefore, the presence of asbestos-containing materials (ACMs) is not anticipated.

Response to Comment B-6. The comment advises that if future project construction requires soil excavation or filling in certain areas, soil sampling may be required. The comment indicates that in the event that soil is contaminated, it must be disposed of properly. The proposed project involves the replacement of an existing pier with a new pier within an active shipyard repair facility. Although the project would require dredging of bay sediments, the project would not require soil excavation or filling in of certain areas, therefore soil sampling is not required. However, dredged sediments would be sampled as required. Please refer to Response B-4 for a discussion of dredged sediment sampling.

COMMENTS

COMMENT LETTER CONTINUES ON NEXT EVEN-NUMBERED PAGE FOLLOWING

RESPONSES

Response to Comment B-7. The comment indicates that the human health and environment of sensitive receptors should be protected during any construction or demolition activities. As identified in the Draft EIR, "…the nearest sensitive receptors are residences located approximately 1,850 ft from the project site and a professional school, the Woodbury School of Architecture, located approximately 1,540 ft from the project site. There are numerous intervening structures separating the proposed project site from the nearest sensitive receptors" (Draft EIR pg. 4.1-28). Furthermore, multiple technical studies and reports have been prepared for the proposed project that take into account impacts to sensitive receptors. The results of these reports have been incorporated into the Draft EIR and have been included as appendices to the Draft EIR. Specifically, the air quality report and Draft EIR Section 4.1 (Air Quality) included a non-carcinogenic acute and carcinogenic chronic health risk assessment associated with project related diesel exhaust. No significant impacts to sensitive receptors would occur based on this assessment (Draft EIR pg. 4.1-24). For the treatment of contaminated sediment, the use of pozzolonic (binding) agents may generate dust that can be a respiratory irritant to workers and nearby receptors. However, Mitigation Measure HAZ-7 requires the use of a pozzolonic wet application process, which would not generate dust and would reduce impacts to human health and environment to a less than significant level (Draft EIR pg. 4.5-24). The noise generated from construction and operation of the project would not affect sensitive receptors due to the distance of the sensitive receptors (more than 1,500 feet) and the nature of the adjacent properties (existing active shipyards and marine terminals) (Draft EIR pg. 4.8-12). The proposed project with mitigation incorporated appropriately addresses the potential impacts to sensitive receptors.

Response to Comment B-8. The comment indicates that if hazardous wastes are or will be generated by the proposed operations, the wastes must be managed in accordance with California Hazardous Waste Control Law and applicable regulations. As stated in the Draft EIR, "…the California HMMA requires that businesses handling or storing certain amounts of hazardous materials prepare an HMBEP, which includes an inventory of hazardous materials stored on site (above specified quantities), an emergency response plan, and an employee training program. It is anticipated that, since the project site is an existing shipyard repair facility, the continuation of existing practices (e.g., maintaining an HMBEP) would still occur with implementation of the proposed project" (Draft EIR pg. 4.5-16). This would include any existing local, State or Federal laws pertaining to the transport and storage of hazardous wastes. Since the project is an existing shipyard facility, it would be required to either amend or obtain a revised U.S. Environmental Protection Agency (EPA) identification number and authorization from the local CUPA. The proposed project would comply with all applicable environmental and hazardous waste regulations.

COMMENTS

Letter B

8) Hazardous substances would be present on the Project site during construction (e.g., fuels and lubricants, wastes from demolition and remediation, paints and solvents). If released, these substances could pose risks to human health and the environment. For example, demolition wastes containing volatile or fluid hazardous wastes, such as PCB-containing oils or residual fuels from abandoned storage tanks, should be contained and packaged in accordance with regulatory requirements and regularly transported to appropriate disposal facilities. **B-9**

9) DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489. **B-10**

If you have any questions regarding this letter, please contact me at ashami@dtsc.ca.gov, or by phone at (714) 484-5472.

Sincerely,

Al Shami
Project Manager
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
nritter@dtsc.ca.gov **B-11**

CEQA # 3548

RESPONSES

Response to Comment B-9. The comment indicates that hazardous substances would be present on the project site during construction and that the release of these substances could pose a risk to human health and the environment. As stated in the Draft EIR, "… the proposed project involves using heavy equipment to dredge sediments, demolish Piers 4 and 5, remove shoreline features (e.g., existing concrete riprap revetments), relocate two existing storm water tanks, and remove dolphin structures within the BAE Systems facility. Some of these activities are expected to require the routine use, transport, or disposal of potentially hazardous materials such as gasoline and diesel fuel" (Draft EIR pg. 4.5-14). The commenter notes that, if released, these hazardous substances resulting from construction activities could pose a risk to human health and the environment. The Draft EIR has identified the potential for use of hazardous materials during demolition and construction activities and has also provided mitigation measures to ensure that fuels, lubricants, wastes from demolition and remediation, paints and solvents will be contained and disposed of properly.

As identified in the Draft EIR (Draft EIR pg. 4.5-33), "…[M]itigation Measure HAZ-1 (Secondary Containment) requires the provision of a secondary containment structure for the storage of fuel, oil, and petroleum projects to reduce the potential for spills during construction. Mitigation Measure HAZ-2 (Dredging Management Plan) requires the implementation of a DMP that will include measures to minimize sediment spillage. Mitigation Measure HAZ-3 (Contingency Plan) requires the implementation of a Contingency Plan to address equipment and operational failures that could occur during dredging operations and cause sediment resuspension. Mitigation Measures HAZ-4 (Health and Safety Plan) and HAZ-5 (Communication Plan) include an H&S Plan and Communication Plan aimed at training workers to prevent and respond to incidents, and requiring the preparation of operational guidelines prior to dredging that address the safe movement of project vessels. Implementation of these mitigation measures during construction activities would minimize potential releases of hazardous materials from construction activities.

Mitigation Measure HAZ-6 (Dredge Practices) requires that water column impacts be reduced by controlling the swing radius of the unloading equipment and the use of a spill plate. Mitigation Measure HAZ-7 (Binding Agents) requires the application of wet pozzolonic agents and other dust control measures, which will reduce the potential impacts to less than significant levels. Mitigation Measure HAZ-8 (Dewatering) requires the decant and/or storm water collection area to have sufficient design capacity (typically 120% of the needed capacity). By having sufficient design capacity, any decant from the staging area would be adequately captured resulting in a less than significant impact. Mitigation Measure HAZ-9 (Haul Trucks) requires measures that will minimize significant spillage or sediment migration from the loading area to the trucks, as well as during transport of sediment, which will reduce impacts to less than significant levels. Mitigation Measure HAZ-10 (Completion Report) requires the documentation of completing the identified mitigation measures prior to the operation of the replacement pier. The Completion Report would ensure that all mitigation measures identified are implemented by the proposed project." No further response is required.

Response to Comment B-10. This comment is informational in nature and provides contact information for cleanup oversight through an Environmental Oversight Agreement or a Voluntary Cleanup Agreement. The comment is noted and no further response is required.

Response to Comment B-11. The comment is informational in nature and provides the commenter's contact information in the event that there are additional questions regarding the comments made on the project. The DTSC's closing comment is noted, and no further response is required.

COMMENTS

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5.5 LETTER C: CALIFORNIA STATE LANDS COMMISSION

Commenter: Cy R. Oggins, Chief, Division of Environmental Planning and Management

Date: June 18, 2012

COMMENTS

Letter C

STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

CURTIS L. FOSSUM, *Executive Officer*
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California Relay Service From TDD Phone **1-800-735-2929**
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June 18, 2012

File Ref: SCH # 2012031024

Mr. Eric Munoz
San Diego Unified Port District
Environmental and Land Use Management Department
3165 Pacific Highway
San Diego, CA 92101-1128

Subject: Draft Environmental Impact Report (DEIR) for the BAE Systems Pier 4 Replacement Project, San Diego County

Dear Mr. Munoz:

The California State Lands Commission (CSLC) staff has reviewed the subject DEIR for the BAE Systems Pier 4 Replacement Project (Project), which is being prepared by the San Diego Unified Port District (District). The District, as the public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The CSLC is a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. Additionally, because the Project involves work on sovereign lands, the CSLC will act as a responsible agency. C-1

CSLC Jurisdiction and Public Trust Lands

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway C-2

RESPONSES

RESPONSE TO LETTER C

California State Lands Commission

Commenter: Cy R. Oggins, Chief, Division of Environmental Planning and Management

Date: June 18, 2012

Response to Comment C-1: The comment describes the role of the San Diego Unified Port District (District) as the Lead Agency under the California Environmental Quality Act (CEQA), and the role of the California State Lands Commission (CSLC) as a Trustee and Responsible Agency. The comment is introductory to other comments in the letter and does not contain any substantive statements or questions about the Draft EIR or the analysis therein. Therefore, no further response is necessary.

Response to Comment C-2: The comment provides additional information regarding the jurisdiction of the CSLC. The comment does not contain any substantive statements or questions about the Draft EIR or the analysis therein. Therefore, no further response is necessary.

COMMENTS

Letter C

landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections. C-2

After review of the information provided and in-house records, CSLC staff has determined that the proposed Project will be located within:

- Ungranted sovereign lands in the San Diego Bay beyond the U.S. Pierhead Line, which are under the leasing jurisdiction of the CSLC; and
- Lands originally granted to the city of San Diego pursuant to Chapter 700, Statutes of 1911, and subsequently transferred to the District pursuant to Chapter 67, Statutes of 1962 and as amended, minerals reserved to the State; therefore, any dredging activities would require a lease from the CSLC.

C-3

BAE Systems currently maintains a lease with the CSLC for the water area and structures beyond the U.S. Pierhead Line (PRC 8054.1). CSLC staff has received an application from BAE Systems to amend Lease No. PRC 8054.1 for the proposed demolition of the existing Pier 4 and Pier 5 structures, removal of five drydock mooring dolphins, dredging, and the construction of a replacement pier and mooring dolphin, and continues to work with BAE Systems to complete the proposed lease amendment. C-4

Project Description and Location

The proposed Project is generally located within a private shipyard (BAE Systems facility) located along the eastern shoreline of central San Diego Bay at 2205 East Belt Street in the Port of San Diego, and includes landside and waterside redevelopment of the Pier 4 site within the facility.

- Proposed landside improvements include: removal of existing revetments along the shoreline, relocation of shoreline infrastructure (e.g., existing waterfront storm water collection tanks), and construction of three new bulkhead sections.
- Proposed waterside improvements include: demolition of the existing Pier 4 and Pier 5 structures at the BAE Systems facility, removal of the five drydock mooring dolphins, underwater dredging, and the construction of a replacement pier and a mooring dolphin.

C-5

The goal of the Project is to replace an existing, aging (52-year-old) pier with a newer, more modern pier that will allow BAE Systems to maintain and repair the current fleet of military and commercial ships, including the littoral combat ship (LCS), the first of a new class of surface combat ships for the U.S. Navy.

Environmental Review

Because the CSLC will need to rely on the DEIR for issuance of a lease, CSLC staff requests the District consider the following comments and suggestions when preparing the final EIR for certification. C-6

RESPONSES

Response to Comment C-3: The comment describes the jurisdiction of the CSLC relevant to the proposed project, which includes the sovereign lands in the Bay beyond the U.S. Pierhead Line. The comment further notes that minerals are reserved to the State; therefore, any dredging activities would require a lease from the CSLC. The comment is informational and consistent with information included in Chapter 3 of the Draft EIR. The comment does not contain any substantive statements or questions about the Draft EIR or the analysis therein. Therefore, no further response is necessary.

Response to Comment C-4: The comment notes that BAE Systems currently maintains a lease with the CSLC. This information is consistent with the information included in Chapter 3 (Section 3.5) of the Draft EIR. The comment is informational and is not a comment on the environmental analysis contained in the Draft EIR. Therefore, no further response is necessary.

Response to Comment C-5: The comment provides a summary description of the proposed project, and is not a comment on the environmental analysis contained in the Draft EIR. The full project description is included as Chapter 3.0 of the Draft EIR (Volume 2 of the Final EIR). Therefore, no further response is necessary.

Response to Comment C-6: The comment notes that the CSLC is a responsible agency under CEQA and that CSLC will need to rely on the Final EIR for its actions. The comment introduces comments that follow and requests that the District consider its comments when preparing the Final EIR for certification.

COMMENTS

Letter C

Project Description

1. The DEIR (page 3-29, paragraph 1) states that a Phase I report was prepared that evaluated the suitability of sediment outside of the Cleanup and Abatement Order (CAO) remedial footprint (Sub-Phase A1, A2, and B1). The results of this study indicate that the dredged material complies with the ocean dumping suitability requirements outlined in Title 40 Code of Federal Regulations Parts 220–228 and can be considered Suitable for Unconfined Aquatic Disposal (SUAD). However, the section goes on to say that the U.S. Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA) will determine if dredge material from the sub phases is suitable for SUAD, based on sediment to be sampled by the removal contractor for landfill profiling in accordance with California Code of Regulations, Title 23, Chapter 15, and Title 27, Chapter 3. C-7

   It is unclear as to when the sampling will occur. Please clarify if the sampling and USACE's/EPA's determination for sub phases A1, A2, and B1 will be made prior to dredging (and sediment release), or after dredging operations have occurred.

Biological Resources

2. Sensitive Species: The DEIR should include a discussion of consultation with the California Department of Fish and Game (CDFG) and U.S. Fish and Wildlife Service (USFWS)/National Marine Fisheries Service (NMFS) regarding sensitive species, including any conditions identified by these agencies. In addition, CSLC staff recommends the development and implementation of a Marine Mammal and Turtle Contingency Plan to minimize impacts to marine resources during construction due to dredging and hammer pile driving, in addition to the monitoring proposed in the existing mitigation measures. C-8

Cultural Resources

3. Submerged Resources: The DEIR (page 6 - 10) states that there has been a review of the "shipwrecks database" in the Project area. However, the specific database used was not provided. Please clarify if the CSLC-maintained shipwrecks database, available at http://shipwrecks.slc.ca.gov, was used for the analysis. The database includes known and potential vessels located on the State's tide and submerged lands; however, the locations of many shipwrecks remain unknown. Please note that any submerged archaeological site or submerged historic resource that has remained in state waters for more than 50 years is presumed to be significant. C-9

4. Title to Resources: The DEIR should also mention that the title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the CSLC. The recovery of objects from any submerged archaeological site or shipwreck may require a salvage permit under Public C-10

RESPONSES

Response to Comment C-7: The comment requests clarification about when sampling will occur for ocean disposal of dredge and when USACE/EPA determination of suitability will occur. The sediment is tested prior to dredging.

The Draft EIR states, "…a Phase I report was prepared that evaluated the suitability of sediment outside of the CAO remedial footprint (Sub-Phase A1, A2, and B1) to be placed at a U.S. Environmental Protection Agency (EPA) approved ocean disposal site commonly known as LA-5 Ocean Dredged Material Disposal Site (LA-5 ODMDS) (AMEC 2011b). The results of this sediment characterization study indicate that the dredged material complies with the ocean dumping suitability requirements outlined in Title 40 Code of Federal Regulations Parts 220–228 and can be considered Suitable for Unconfined Aquatic Disposal (SUAD), in accordance with (and pending final approval of) the National Dredging Policy, which is implemented by the National Dredging Team, including a variety of agencies including the EPA and U.S. Army Corps of Engineers (USACE) (AMEC 2011b)" (Draft EIR pg. 3-29).

At the time the Draft EIR was released for public review, the Phase I Report for Sub-Phase A1 dredging was still undergoing review by the USACE and the EPA. Since that time, the USACE has provided concurrence on the findings of the Phase I report mentioned previously and determined that the dredge material from Sub-Phase A1 is SUAD. Preliminary testing has been done for dredging Sub-Phase B1 as well. The initial results indicate that upland disposal will be the appropriate course of action for this dredging phase.

Response to Comment C-8: The comment requests information regarding consultation with the California Department of Fish and Game (CDFG) and the U.S. Fish and wildlife Service (USFWS)/ National Marine Fisheries Service (NMFS) regarding sensitive species. Numerous Federal, State, and local laws, regulations, and permit requirements are applicable to the Pier 4 Replacement Project, and the applicant will be required to secure permits from multiple agencies prior to implementing the project. Table 3.F in Chapter 3.0 of the Draft EIR identifies the permits and approvals required for the Pier 4 Replacement Project, including permits from the USACE. The resource agencies (e.g., USFWS, NMFS, and CDFG) do not issue permits. Instead, these agencies provide comment and direction as part of the overall permit process. In the case of the Pier 4 Replacement Project, the project will require a Clean Water Act (CWA) Section 404 permit (issued by the USACE) and as part of this permit process, a Section 7 consultation will likely be required with the USFWS. This consultation will be to determine whether turbidity from dredging or loss of forage habitat from bay coverage constitutes take of a listed species (i.e., California least tern and green sea turtle).

In addition, the CSLC recommends the development and implementation of a Marine Mammal and Turtle Contingency Plan to minimize impacts to marine resources during construction, in addition to the monitoring proposed in the existing mitigation measures.

It is unlikely that green sea turtles occur in the area and it is further unlikely that, if present, turtles would remain in the area during construction. In the remote chance that turtles were to be present during the commencement of construction, they could be harmed by dredging activities or acoustic pressure waves from pile installation. BAE Systems proposes to utilize water jet installation for many of the piles. This method would eliminate acoustic pressure waves during pile installation. Due to the Federal threatened species status of the turtle, any take, including harm and harassment would be considered significant.

To ensure impacts to the sea turtles are reduced to a less than significant level, Mitigation Measures BIO-1 through BIO-4 will be implemented (see Draft EIR Section 4.2.5). Mitigation Measure BIO-1 requires the project applicant to retain a qualified biologist to monitor project construction activities. Mitigation Measure BIO-2 specifies that a qualified biologist shall conduct monitoring within 500 feet of any impact hammer pile driving. Mitigation Measure BIO-3 states that, when performing impact pile driving, the contractor shall commence work with one blow followed by a one-minute period of no pile driving. Mitigation Measure BIO-4 specifies that construction vessel traffic not exceed the existing ambient speed for the shipyard. Mitigation Measure BIO-2 specifically states that the contractor shall not start work if any observations of turtles or marine mammals are made prior to starting impact hammer pile driving. The applicant shall ensure that work will not re-commence until the turtle(s) or marine mammal(s)

COMMENTS

COMMENT LETTER CONTINUES ON NEXT EVEN-NUMBERED PAGE FOLLOWING

have left the area, or ten minutes have passed. Therefore, the measures as included in the Draft EIR reduce project impacts to marine mammals and sea turtles to less than significant.

As noted above, the CSLC has requested that a Marine Mammal and Turtle Contingency Plan also be required. It is understood that the Contingency Plan is intended to identify the actions taken in the event that, in spite of the efforts identified in the mitigation measures to stop work if either is present in the vicinity of the construction activity, a marine mammal or sea turtle is injured.

The District finds that the mitigation measures as included in the Draft EIR reduce the impact to marine mammals and sea turtles to less than significant, and additional mitigation is not required under CEQA. This is partly due to ongoing work efforts between the District and the National Oceanic and Atmospheric Administration (NOAA) to tag sea turtles. The coordination of tagging of sea turtles enables Global Positioning System (GPS) tracking and the collection of data on the travel paths and whereabouts of existing sea turtles in San Diego Bay. Based on the most recent data collected from this work effort, the majority of sea turtles are located in South Bay with most only traveling out of South Bay to reach nesting sites. However, the District also recognizes the role of the CSLC as a responsible agency for the project under CEQA, and the sensitivity of protected species resources. Therefore, **Mitigation Measure BIO-13** will be included in the Final EIR to require the preparation of a Marine Mammal and Turtle Contingency Plan prior to the initiation of dredging.

BIO-13 Marine Mammal and Turtle Contingency Plan. Prior to the initiation of impact hammer pile driving activities, the project applicant shall retain a qualified biologist to prepare a Marine Mammal and Turtle Contingency Plan (Contingency Plan) to identify the actions taken in the event that, in spite of the requirement to stop work if a marine mammal or sea turtle is present in the vicinity of the construction activity, a marine mammal or sea turtle is injured. The Contingency Plan shall be submitted to the District and United Stated Fish and Wildlife Service (USFWS) or other appropriate resource agency for review and approval and shall include but not be limited to notification "trees," identification of rescue centers, information for key contacts, and plans of action. The applicant shall ensure that this measure is implemented for the duration of impact hammer pile driving activity.

Response to Comment C-9: The comment requests information regarding the database used pertaining to the presence of shipwrecks in the project vicinity, and notes that the CSLC maintains a shipwrecks database (see http://shipwrecks.slc.ca.gov). The comment further notes that the locations of many shipwrecks remain unknown. The comment also states that it is presumed that any submerged archaeological site or submerged historic resource that has remained in State waters for more than 50 years is presumed to be significant.

The District acknowledges the information provided by the CSLC. A review of the CSLC shipwrecks database at http://shipwrecks.slc.ca.gov was conducted, and no shipwrecks were identified in or near the project site. Furthermore, the proposed project site has been an active marine industrial site for many decades. During that time, the submerged portion of the project site has been subject to periodic maintenance dredging. There is no record of past discoveries of submerged resources in or adjacent to the project footprint. Furthermore, as noted in Chapter 6 of the Draft EIR, there is no historic connection between the Pier 4 project site and the Navy and limited connection to the tuna industry. Therefore, the likelihood of encountering an unknown submerged resource is considered small. However, should such a resource be encountered in the course of project activities, dredging activity would cease. The resource would be evaluated by a qualified archaeologist and, if appropriate, a resource recovery plan would be prepared subject to CSLC approval.

Response to Comment C-10: The comment notes that the title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands is vested in the State and under the jurisdiction of the CSLC. The District acknowledges the State's jurisdiction. The CSLC comment letter is included in this RTC document and is therefore included in the Final EIR for the project.

COMMENTS

Letter C

Resources Code section 6309. On statutorily granted tide and submerged lands, a permit may be issued only after consultation with the local grantee and a determination by the CSLC that the proposed salvage operation is not inconsistent with the purposes of the legislative grant. CSLC staff requests that the District consult with Senior Staff Counsel Pam Griggs at the contact information noted at the end of this letter, should any cultural resources be discovered during construction of the proposed Project. **C-10**

Thank you for the opportunity to comment on the DEIR for the Project. As a responsible Agency, the CSLC will need to rely on the Final EIR for the issuance of any amended or new lease as specified above and, therefore, we request that you consider our comments prior to certification of the EIR. Please send additional information on the Project to the CSLC staff listed below as plans become finalized. **C-11**

Please send copies of future Project-related documents, including an electronic copy of the Final EIR, Mitigation Monitoring and Reporting Program (MMRP), Notice of Determination (NOD), CEQA Findings and, if applicable, Statement of Overriding Considerations when they become available, and refer questions concerning environmental review to Cynthia Herzog, Environmental Scientist, at (916) 574-1310 or via e-mail at Cynthia.Herzog@slc.ca.gov. For questions concerning archaeological or historic resources under CSLC jurisdiction, please contact Senior Staff Counsel Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Michelle Andersen, Public Land Management Specialist at (916) 574-0200, or via email at Michelle.Andersen@slc.ca.gov. **C-12**

Sincerely,

Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
Michelle Anderson, LMD, CSLC
Cynthia Herzog, DEPM, CSLC

RESPONSES

Response to Comment C-11: The comment concludes the letter and notes that the CSLC is a responsible agency under CEQA and it will need to rely on the Final EIR for the issuance of an amended or new lease. The comment does not contain any substantive statements or questions about the Draft EIR or the analysis therein. Therefore, no further response is necessary.

Response to Comment C-12: The comment requests that the Final EIR be emailed to CSLC, and provides contact information for CSLC staff. Specifically, the comment requests electronic copies of the Final EIR, the Mitigation Monitoring and Reporting Program (MMRP), the Notice of Determination (NOD), the CEQA Findings of Fact, and, if applicable, the Statement of Overriding Considerations when they become available. The District will be pleased to provide an electronic copy of the Final EIR and all its components to the CSLC.

COMMENTS

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5.6 LETTER D: SAN DIEGO COASTKEEPER

Commenter: Jill Witowski, Legal Clinic Director

Date: June 20, 2012

COMMENTS

Letter D

SAN DIEGO COASTKEEPER
TEL 619.758.7743
FAX 619.224.4638
ADDRESS 2825 DEWEY ROAD, SUITE. # 200
SAN DIEGO, CALIFORNIA 92106

June 20, 2012

Via e-mail to c-emunoz@portofsandiego.org
San Diego Unified Port District
Environmental and Land Use Management (ELUM)
Attn: Eric Munoz / ELUM Staff Extension
P.O. Box 120488
San Diego, California 92112-0488

RE: San Diego Coastkeeper Comments on BAE Pier Replacement Environmental Impact Report (No. 2012031024)

Dear Mr. Munoz:

San Diego Coastkeeper, a local watchdog organization committed to protecting and restoring fishable, drinkable, and swimmable San Diego waters, respectfully submits the following comments on the draft Environmental Impact Report for the BAE Pier 4 & 5 Replacement Project. San Diego Coastkeeper reserves the right to rely on all comments submitted. D-1

Background

The project site is located within an active shipyard zone in San Diego Bay that is contaminated. For decades, BAE Systems and other dischargers generated an assortment of waste that accumulated in the sediment of San Diego Bay. *See* Cleanup and Abatement Order R9-2012-0024 at 2. This polluted marine sediment has impaired aquatic life and adversely affected human health. The Shipyard Sediment Site is undergoing an extensive cleanup process, and it is critical that the Pier Replacement project not interfere with the ultimate goal of this process: to restore the beneficial uses of San Diego Bay within the Shipyard Sediment Site. D-2

A. BAE Should Treat the Entire Dredged Area as if it Threatens Benthic Communities' Health.

Ample evidence demonstrates that sediments within the proposed project site pose high risk to benthic communities. BAE recognizes that a portion of the site is included in the remedial footprint for the Shipyard Sediment Cleanup, and the EIR reflects the need to take special care with dredged sediment within the footprint area. However, BAE proposes to assume that the sediment to be dredged in Phase A is not contaminated until it conducts post-dredging tests to determine contamination levels. *See* BAE Pier 4 Replacement EIR at 3-29, 3-35. If the material is contaminated, BAE may significantly impact the environment by dredging that sediment without proper sediment controls, best management practices, and other measures to prevent or mitigate environmental harm. D-3

This approach is unacceptable. Given the evidence that San Diego Bay is impaired and the area of the shipyard site is harming benthic communities, aquatic life, and threatens human health, BAE should use all available best management practices to assure that the sediment does not D-4

RESPONSES

RESPONSE TO LETTER D

San Diego Coastkeeper

Commenter: Jill Witowski, Legal Clinic Director

Date: June 20, 2012

Response to Comment D-1. The comment is introductory and states that the San Diego Coastkeeper is a local watchdog organization committed to protecting San Diego waters. Since the San Diego Coastkeeper's introduction does not raise any environmental issues, no further response is required.

Response to Comment D-2. The commenter notes that the project site is located in an active shipyard and expresses the view that the Pier 4 Replacement project should not interfere with the goal of the cleanup project within the Shipyard Sediment site (CAO R9-2012-0024). The proposed project is consistent with and will not impede the implementation of the CAO. As stated in the Draft EIR, the construction phase of the proposed project would require dredging within five different areas in the San Diego Bay. Of these five areas, two dredging phases, Sub-Phase B2 and Sub-Phase C, are also within the CAO R9-2012-0024 remedial footprint.

"The proposed project will not require dredging on the south side of the proposed Pier 4 or within the inshore basin area. Dredging in those locations will occur as part of the Shipyard Sediment Project site, as mandated by the CAO issued by the San Diego RWQCB. It is anticipated that the area where the proposed Pier 4 replacement will be located, and a small area on the northeast side of Pier 4, will be dredged as part of the CAO. If the CAO is not implemented in a timely manner consistent with the proposed project construction schedule, BAE Systems may initiate the approval process for dredging within these additional areas prior to construction of the new pier. Specifically, these areas are Dredging Sub-Phase B2 (2,006 cubic yards) and Dredging Sub-Phase C (4,250 cubic yards). [A]pproximately 6,256 cy or 0.70 acre of dredged sediments are within the remedial footprint for the Shipyard Sediment Project site and would be under the requirements for CAO No. R9-2012-0024. For the purpose of this analysis, it is assumed that dredging and upland disposal of 6,256 cy of dredged material within the CAO remedial footprint will be incorporated into the proposed project" (Draft EIR pg. 4.6-31). The portions of the dredging area that overlap with the CAO (Phases B2 and C) would also adhere to requirements identified in the Final CAO and Final EIR for the Shipyard Sediment site project. Therefore, the proposed project would not interfere with the ultimate goal of Cleanup and Abatement Order No. R9-2012-0024.

Response to Comment D-3. The comment is correct in noting that a portion of the project site is included in the remedial footprint for the Shipyard Sediment Cleanup area and notes that the Draft EIR reflects the need to take additional steps with dredged sediment within the footprint area. However, the comment is not correct in stating that the proposed project would not test the dredged sediment in Phase A and Phase B until post-dredging activities commence. Furthermore, the comment suggests that if the sediment to be dredged in Phase A and Phase B is contaminated, that no BMPs would be applied in the event that the sediment is found to be contaminated.

Contrary to the commenter's understanding that no testing of the Phase A sediment had been done, the Draft EIR states, "…a Phase 1 report was prepared that evaluated the suitability of sediment outside of the CAO remedial footprint (Sub-Phase A1, A2, and B1) to be placed at a U.S. Environmental Protection Agency (EPA) approved ocean disposal site commonly known as LA-5 Ocean Dredged Material Disposal Site (LA-5 ODMDS) (AMEC 2011b). The results of this sediment characterization study indicate that the dredged material complies with the ocean dumping suitability requirements outlined in Title 40 Code of Federal Regulations Parts 220–228 and can be considered Suitable for Unconfined Aquatic Disposal (SUAD), in accordance with (and pending final approval of) the National Dredging Policy, which is implemented by the National Dredging Team, including a variety of agencies including the EPA and U.S. Army Corps of Engineers (USACE) (AMEC 2011b)" (Draft EIR pg. 3-29).

At the time the Draft EIR was released for public review, the USACE and EPA had not provided concurrence on the findings of the Phase 1 report referred to in the Draft EIR. As a result, the Draft EIR

COMMENTS

Letter D

impact water quality or aquatic life. San Diego Coastkeeper urges BAE to adopt the following practices for the entire dredge site: D-4

1. **BAE Should Use Inner- and Outer-Boundary Silt/Turbidity Curtains for All Dredging Activities, Not Just Phases B2 and C.**

BAE plans to use inner- and outer-boundary silt/turbidity curtains only for dredging areas subject to upland disposal. *See* Mitigation Measure HAZ-6 at 4.5-22. All sediment poses risk to the aquatic environment. Therefore, BAE must use inner- and outer-boundary silt/turbidity curtains while dredging all areas. D-5

2. **BAE Should Limit Dredge Cycle Time.**

The majority of sediment resuspension comes from the impact of the clamshell bucket with the bottom. Lowering cycle time would decrease the velocity of the dredge bucket in the water, and would reduce the sediment introduced to the water column by the movements of the dredge bucket. All sediment reintroduced into the water column poses a risk of contamination and BAE should take all possible steps to reduce resuspension. Therefore, BAE should limit dredge cycle time to a level which will meet this goal. D-6

3. **BAE Should Use Environmental Style Closed Cable Arm Buckets for All Dredging Activities, Not Just Phases B2 and C.**

BAE plans to use "environmental" style closed cable arm buckets only for dredging areas subject to upland disposal. *See* BAE Pier 4 Replacement EIR at 3-45. BAE has not demonstrated that phase A1, A2, and B1 sediment poses no risk of contamination to the aquatic environment. Therefore, BAE must use closed cable arm dredge buckets for all dredging phases. D-7

4. **BAE Must Implement BMPs to Ensure the Dredge Bucket Fully Closes During Dredging.**

The draft EIR identifies the potential for debris to cause the dredge bucket to not close fully. *See* BAE Pier 4 Replacement EIR at 4.5-17. If this happens, the EIR explains that sediment would be reintroduced into the water column. BAE should mitigate this potentially significant effect by requiring BMPs to ensure the dredge bucket fully closes while dredging. D-8

5. **BAE Should Monitor Water Quality During Dredging Operation to Ensure that the Dredging Does Not Violate Water Quality Standards.**

Dredging contaminated sediment poses a real threat to water quality. BAE should monitor water quality during dredging to assure that dredging operations do not violate water quality standards. Water samples should be collected on a daily basis during dredging, down current from the dredging and within 250 feet of the center of the dredging activity. The water should be monitored for turbidity, dissolved oxygen, metals, PCBs and Tributyl Tin. D-9

indicated that, "…the USACE and EPA will determine if dredge material from Sub-Phase A1 is Suitable for Uncontained Aquatic Disposal (SUAD). If the material is found unsuitable for ocean disposal, it will be disposed of at an appropriate upland disposal facility, specifically the Otay Sanitary Landfill at 1700 Maxwell Road, Chula Vista, California 91911. The sediment would be sampled by the removal contractor for landfill profiling in accordance with Title 23, Chapter 15, and Title 27, Chapter 3 of the CCR, and usually allowed to cure for several days while daily work on the sediment continues.

Since the release of the Draft EIR, the USACE and EPA have provided concurrence with the findings of the Phase 1 report and determined that the dredge material from Sub-Phase A1 is Suitable for Uncontained Aquatic Disposal and is not contaminated.

As identified in Draft EIR Table 3.C (Dredging Phases), Sub-Phase A2 is identified as slated for upland disposal and would be required to meet the analytical and strength requirements of the disposal facility. Once the sediment has met the requirements of the disposal facility, the material is certified for disposal (by the landfill operator), manifested, loaded into on-road trucks (typically using a large-wheeled front-end loader), weighed to document compliance with California Department of Transportation (DOT) regulations, transported, and deposited at Otay Sanitary Landfill" (Draft EIR pg. 3-29). Furthermore, Sub-Phase A2 would be subject to the same BMP procedures identified for all upland dredging as identified in Mitigation Measures HAZ-2 (Dredging Management Plan), HAZ-3 (Contingency Plan), HAZ-6 (Dredging Operation Practices), HAZ-7 (Binding Agents), HAZ-8 (Dewatering), and HAZ-9 (Haul Trucks). Although Sub-Phase A2 is not identified as being contaminated, the adherence to these existing Draft EIR mitigation measures would ensure that proper sediment controls, BMPs, and other protective measures are in place during dredging activities.

Preliminary testing has also been done for dredge Sub-Phase B1. The initial results indicate that upland disposal will be the appropriate course of action for this dredging phase. Similar to Sub-Phase A2, Sub-Phase B1 would be subject to the same BMP procedures identified for all upland dredging, which includes sub-phases that contain contaminated sediment. The mitigation measures applied to dredge destined for upland disposal have taken into account the possibility of contaminated dredged sediments. Therefore, adherence to the identified mitigation measures would ensure that proper sediment controls, BMPs, and other protective measures are in place. Furthermore, as noted in Responses to Comments D-5 and D-7 below, BAE Systems has committed to implementing additional BMPs for the Sub-Phase B1 dredging.

Response to Comment D-4. Please refer to Response to Comment D-3 for treatment sediment approach. The comment suggests that the proposed project use all available best management practices listed in the comments that follow. No further response is required.

Response to Comment D-5. The comment requests that BAE use inner- and outer-boundary silt curtains for all dredge areas. The purpose of the use of inner and outer boundary silt curtains for areas bound for upland disposal is to capture the amount of contaminated sediment within the active dredge area to prevent contaminated sediment from causing an impairment of surrounding conditions. Since Dredge Sub-Phase A1 is not contaminated, no silt curtain is recommended.

However, BAE does acknowledge the comment's concerns regarding dredge sediment re-suspension and will use an inner- and out-boundary silt curtain for Sub-Phase B1. Mitigation Measure BIO-5 requires the use of turbidity curtains for dredge areas identified for upland disposal. Since Sub-Phase B1 is now identified for upland disposal (see FEIR Section 3.0 – Errata and Revisions), Mitigation Measure BIO-5 would apply to Sub-Phase B1 and would require the use of a turbidity curtain.

Response to Comment D-6. The comment states that a lower cycle time would decrease the volume of sediment reintroduced into the water column. The comment requests that BAE limit the dredge cycle time during dredging activities. As a general practice, the dredging activities would occur on a lower cycle time to ensure that the dredge bucket fully closes while dredging (see Response to Comment D-8) and that no unforeseen marine debris is caught in the dredge bucket. These practices require a lower cycle time (or

COMMENTS

COMMENT LETTER CONTINUES ON SECOND EVEN-NUMBERED PAGE FOLLOWING

velocity) as to not damage the dredge equipment and to ensure worker safety. Therefore, a lower cycle is a standard practice incorporated into the project.

Response to Comment D-7. The comment states that environmental style closed cable arm buckets should be utilized for all dredging activities (inclusive of Sub-Phases A1, A2, and B1) and not just for dredging area subject to upland disposal due to the potential of contaminated sediments. As identified in Response to Comment D-3, during the public review comment period, the USACE provided concurrence with the findings of the Phase 1 report and determined that the dredge material from Sub-Phase A1 is Suitable for Uncontained Aquatic Disposal and does not pose a risk of contamination to the aquatic environment. Since Sub-Phase A1 poses no risk of contamination to the aquatic environment, closed cable arm dredge buckets can be used but need not be mandated. As illustrated in Draft EIR Figure 3.8, dredge from Sub-Phase A2 is identified for upland disposal and would use closed cable arm dredge buckets.

In response to the comment, the District will require that closed cable arm dredge buckets be used as part of dredging activities associated with Dredging Sub-Phase A2 and Sub-Phase B1. However, it should be noted that the exclusive use of environmental style closed cable arm buckets for all dredging activities is not reasonably feasible for technical reasons. As stated in the Draft EIR, "…there are three general geologic units that underlie the site and site vicinity consisting of undocumented fill, bay deposits and the Bay Point Formation" (Draft EIR pg. 4.3-2). Based on existing conditions within the bay and previous experience dredging in the bay, the environmental style closed cable arm buckets are unable to penetrate the Bay Point Formation. It is anticipated that, in the event that Bay Point Formation sediment is encountered, a different type of bucket would be required. However, it is further anticipated that any contaminated sediment would occur within the undocumented fill and bay deposits and that environmental style closed cable arm buckets will be used.

Response to Comment D-8. The comment states that the Draft EIR should include BMPs to ensure that the dredge bucket fully closes while dredging. The District would require the use of an automatic closure switch on the dredge bucket. The use of the automatic closure switch would inform the operator if the dredge bucket were open or closed. If the bucket is not closed, the system will not allow the bucket to be lifted out of the water. Therefore, the proposed dredging activities would be required to adhere to proper dredging equipment operation including the potential for dredge bucket closure issues and sediment re-suspension in the water. To ensure the Draft EIR includes BMPs for dredge bucket closure, **Mitigation Measure BIO-14** will be included in the Final EIR to require compliance with all relevant Mitigation Monitoring Reporting Program components, which include requirements for automatic monitoring of the dredging operations.

BIO-14 **Cleanup Abatement Order MMRP Compliance.** The project applicant shall ensure that construction activities within the scope of Shipyard Sediment Site Cleanup and Abatement Order (R-9-2012-0024) comply with all relevant Mitigation Monitoring and Reporting Program components of the Regional Water Quality Control Board's EIR.

In addition, a revision to **Mitigation Measure HAZ-6** detailing compliance to **Mitigation Measure BIO-14** will also be included in the Final EIR.

HAZ-6 **Upland Dredging Operation Practices.** During dredging operations, BAE Systems shall ensure that the dredge contractor is implementing standard BMPs for minimizing resuspension and spillage through contractor contract specifications. Such BMPs shall include, but not be limited to, the following:

- The contractor shall remove dredge material and not stockpile material on the bottom of the San Diego Bay floor, and shall not sweep or level the bottom surface with the bucket.
- The contractor shall not overfill the digging bucket because overfill results in material overflowing back into the water.

COMMENTS

COMMENT LETTER CONTINUES ON NEXT EVEN-NUMBERED PAGE FOLLOWING

- The contractor shall deploy inner- and outer-boundary floating silt/turbidity curtains for the dredge areas subject to upland disposal. These two curtains (also referred to as "double" silt/turbidity curtains) will be located around the dredge activity area at all times and around the immediate dredge barge/bucket area. These double silt/turbidity curtains shall be utilized for containment of the dredge area, while configurations, technologies, and actual locations of silt curtains in relation to the dredge barge shall be finalized during the design phase of the project.
- Contractors shall control the swing radius of the unloading equipment within the silt curtain and to reduce the amount of sediment spillage in the dredge area.
- The contractor shall not overfill the material barge to a point where overflow or spillage could occur. Each material barge shall be marked in such a way to allow the operator to visually identify the maximum load point. The marking should allow sufficient interior freeboard to prevent spillage in rough water such as ship wakes during transit. Initiating the material barge marking shall minimize impact of load spillage during transit to the ocean disposal site.
- The contractor shall not use weirs as a means to dewater the scow and shall allow additional room for sediment placement. Preventing this action shall minimize the introduction of turbidity to the water column.
- The contractor shall place material in the material barge such that splashing or sloshing does not occur, which could send sediment back into the water. Splashing can be controlled by restricting the drop height from the bucket.
- If the use of a grate to collect debris is required, the contractor shall not allow material to pile up on the grate and flow or slip from the grate back into the water. The debris scalper shall be positioned in such a way as to be totally contained on the shore side of the unloading operations. The dredge operator shall visually monitor for debris build-up and alert the support personnel on the barge to assist in clearing the debris, as necessary. Debris that is derived from dredging activities shall be removed from the grate by the environmental clamshell bucket and placed in a contained area on the dredge barge or in a second material barge for subsequent removal and disposal.
- The contractor shall restrict barge movement and work boat speeds (i.e., reducing propeller wash) in the dredge area.
- For dredged sediment subject to upland disposal, the contractor shall reduce hardscape spillage that could occur during the transfer from excavator arm onto transport vehicles by sloping the hardscape near the spill plate into a collection sump or alternative means (e.g., pier containment) to allow water and fluidized mud that may fall to be collected.
- For dredged sediment subject to upland disposal, the contractor shall use a power wash unit to reduce impacts related to spillage from the excavator arm onto transport vehicles. In the event that sediment is spilled onto the transport vehicle, it can be quickly washed into the collection sump.
- Additional requirements as referenced in Mitigation Measure BIO-14 shall be applied to upland dredging activities as applicable.

Response to Comment D-9. The comment states dredging of contaminated sediment poses a threat to water quality and that water quality should be monitored during dredging activities to ensure that dredging does not violate water quality standards. For sediments that are slated for upland disposal, including the

COMMENTS

Letter D

6. BAE Should Dispose All Dredged Material Upland.

Ocean disposal poses several environmental risks and should be avoided, particularly for these harmful sediments. The Regional Board recognized these risks in the environmental impact report associated with the Shipyard Sediment Site. In this report, the Regional Board concluded that because the pollutants in the contaminated sediment at the Shipyard Sediment Site would not meet the criteria for ocean disposal due to the elevated chemical concentrations, ocean disposal was "not deemed feasible." The Regional Board rejected ocean disposal as a feasible option for disposing shipyard sediment. *See* San Diego Regional Water Quality Control Board, Draft Environmental Impact Report (Jun. 16, 2011). D-10

Indeed, a new report on dangerous contaminants found in fish caught from San Diego Bay underscores how important it is that all contaminated sediment at the project site be subject to upland disposal. The report specifically warns against the dangers of eating these fish, raising concern for all people in San Diego who consume local fish, and posing a significant threat for subsistence fishermen who depend on their catch to feed themselves and their families. *See* Press Release, State Water Resources Control Board, Survey Reveals High Methyl mercury in Coastal Sport Fish (May 24, 2012), http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/coast_study/bog2012may/media_release2012may.pdf. Considering the fragile condition of aquatic life in San Diego Bay, BAE should take all feasible measures to protect aquatic life. D-11

Moreover, BAE proposes that any ocean disposal would occur at an EPA approved ocean disposal site commonly referred to as LA-5. Although disposal at LA-5 is limited to dredged materials that comply with EPA ocean dumping regulations and U.S. Army Corps of Engineers permitting regulations, reports from the City of San Diego's water sampling station E-3, adjacent to LA-5, indicate that LA-5 is extremely polluted. *See* 2010 Annual Reports and Summary – Point Loma Wastewater Treatment Plant & Ocean Outfall, Monitoring and Reporting Program No. R9-2009-0001 NPDES No. CA 0107409 (Jun. 30, 2010), http://www.sandiego.gov/mwwd/pdf/pm/2010oceanchemistries.pdf. Tests have also detected PCBs in sediments and in tissues of local bottom-feeding fish, suggesting that the contamination levels at LA-5 are harmful to aquatic life. For these reasons, BAE should not dump any dredged sediment in LA-5. *See* Ed Parnell, *Discriminating Sources of PCB Contamination in Fish on the Coastal Shelf Off San Diego, California*, 56 Marine Pollution Bulletin 1992, 1993 (2008). D-12

B. BAE Should Delay Finalizing Project Details Until the Shipyard Cleanup Remedial Action Plan is Finalized.

A portion of the project site is within the Shipyard Cleanup remedial footprint, and the remainder of the site is adjacent to the cleanup footprint. Under the Cleanup Order, the responsible parties must propose a Remedial Action Plan, which will be reviewed and approved by the Regional Board. Because this Remedial Action Plan directly impacts this project, planning for this project should not be finalized until the Remedial Action Plan has been approved by the Regional Board. D-13

sediments within the CAO remedial footprint, water quality would be monitored per standards and protocols identified in the Final CAO, Final EIR, and Draft Remedial Action Plan (once approved) for the San Diego Shipyard Sediment Site. Dredge Sub-Phase A1 has been tested and approved for ocean disposal; therefore, water quality monitoring is not mandated.

Response to Comment D-10. The comment expressed an opinion that ocean disposal should be avoided. The comment is correct in noting that the contaminated sediment at the Shipyard Sediment site would not meet the criteria for ocean disposal due to the elevated chemical concentrations. The comment is also correct in noting that the RWQCB rejected ocean disposal as feasible option for disposing of shipyard sediment. However, the comment inappropriately applies this line of reasoning to all dredged sediments within the proposed Pier 4 Replacement project dredging area and makes the incorrect assumption that all dredged sediments within the project dredging area are contaminated. The shipyard sediment identified within the Shipyard Sediment site refers to the area within the CAO remedial footprint only. The BAE Systems Pier 4 Replacement Draft EIR specifically states, "…if the CAO is not implemented in a timely manner consistent with the proposed project construction schedule, BAE Systems may initiate the approval process for dredging within these additional areas prior to construction of the new pier. Specifically, these areas are Dredging Sub-Phase B2 (2,006 cubic yards) and Dredging Sub-Phase C (4,250 cubic yards). As illustrated in Figure 3.8, approximately 6,256 cy or 0.70 acre of dredged sediments are within the remedial footprint for the Shipyard Sediment Project site and would be under the requirements for CAO No. R9-2012-0024. For the purpose of this analysis, it is assumed that dredging and upland disposal of 6,256 cy of dredged material within the CAO remedial footprint will be incorporated into the proposed project" (Draft EIR pg. 4.6-32). In addition, Dredging Sub-Phase A2 is identified for upland disposal. As stated in Response to Comment D-3, during the public review comment period, the USACE and EPA have provided concurrence with the findings of the Phase 1 report and determined that the dredge material from Sub-Phase A1 is not contaminated and is Suitable for Uncontained Aquatic Disposal The District recognizes the authority of the EPA and USACE to manage LA-5 and approve ocean disposal in accordance with the National Dredging Policy.

Response to Comment D-11. The comment states that all contaminated sediment at the project site should be subject to upland disposal. The District concurs with this comment and notes that the sediment is tested prior to disposal to ensure appropriate handling procedures are used and the appropriate disposal destination is selected.

The comment states how important it is that all contaminated sediment at the project site be subject to upland disposal. The District agrees with this statement. The Draft EIR identified Dredging Areas (Phase C and Sub-Phase B2) within the CAO remedial footprint as requiring upland disposal. In addition, the Draft EIR identified Dredging Area Sub-Phase A2 for upland disposal. These dredging areas have been identified as having sediment that would require additional treatment. Therefore, the Draft EIR is based on all contaminated sediment being subject to upland disposal. As previously stated, Sub-Phase A1 has confirmed by the USACE and EPA as being suitable for ocean disposal. Therefore, sediment in this area is not considered to be contaminated and is not slated for upland disposal.

The comment cites a press release regarding a State Water Resources Control Board Survey done on methyl mercury levels in Coastal Sport Fish. As stated in the press release, "…the initial screening study is a first step in an effort to identify and quantify contaminants in California's coastal waters to provide a detailed evaluation of human and wildlife exposure, and to establish priorities for cleanup actions. More thorough sampling will be required for the California Office of Environmental Health Hazard Assessment to develop recommendations on how often people can eat fish from the different areas." Although the study provides additional information related to methyl mercury levels in coastal fish, given the large geographic scope of this study (coastal California), the article cited is not specific to the proposed project or the Draft EIR.

The comment further states that BAE should take all feasible measures to protect wildlife. As indicated in *CEQA Guidelines*, Section 15151, "… an EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes

COMMENTS

COMMENT LETTER CONTINUES ON NEXT EVEN-NUMBERED PAGE FOLLOWING

account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. … The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure." The Draft EIR provides feasible mitigation measures to protect wildlife during the implementation of the proposed project. As identified in the Draft EIR, Biological Resources Section 4.2.5 (Analysis of Project Impacts, Draft EIR pg 4.2-20 4.2-37), the analysis provides a detailed discussion regarding construction and operational activities in relation to biological resources and recommends mitigation measures that would ensure that any impacts related to the identified biological resources are mitigated to a less than significant level. These discussions and conclusions are based on two project-specific biological resource assessments. The biological resources analysis included in the Draft EIR represents a good faith effort at full disclosure and completeness and no further response is required.

Response to Comment D-12. The comment expresses that LA-5 is not a suitable disposal facility. Please refer to Response to Comment D-10. As stated in *CEQA Guidelines,* Section 15151, "… an evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate." The comment correctly states that any ocean disposal associated with the proposed project would occur at theEPA-approved ocean disposal site known as LA-5, which would require compliance with EPA's ocean dumping regulations and the USACE permitting regulations. However, the comment states that BAE should not dispose of any dredged sediments in LA-5 and provides two documents to support the claim that LA-5 is extremely polluted. The first document cited is the 2010 Annual Reports and Summary for the Point Loma Wastewater Treatment Plant and Ocean Outfall Monitoring and Reporting Program. Based on the Map of Recurring and Regional Monitoring Stations included in this 2010 Annual Report, there is only one water sampling station (E-3) on the edge of LA-5. There are no other water monitoring stations surrounding LA-5 or within LA-5. The comment is not correct in relying on a single data point that is not within LA-5 to make the statement the LA-5 is extremely polluted.

The comment cites another document, *Discriminating Sources of PCB Contamination in Fish on the Coastal Shelf Off San Diego, California*, and suggests that because PCBs have been detected in sediments and in the tissues of local bottom-feeding fish, contamination levels at LA-5 are harmful to aquatic life. However, as stated in the cited document, "… while it is clear from this study that the main source of PCBs contaminating fish on the coastal shelf off San Diego is the disposal of contaminated sediments dredged from San Diego Bay, it is not clear whether this level of contamination significantly impacts fish populations or the ecosystems of which they are a part. Furthermore, there is no evidence that PCB contamination in San Diego fishes represents a human health issue. These concerns are outside the focus of this study." As previously stated, all identified contaminated sediment within the dredging areas of the proposed project would be slated for upland disposal. Therefore, no contaminated sediment would be disposed of at LA-5.

Finally, the District recognizes the authority of the EPA and USACE to manage LA-5 and to approve ocean disposal in accordance with the Marine Protection, Research and Sanctuaries Act, and with the National Dredging Policy requirements.

Response to Comment D-13. The comment indicates that a Remedial Action Plan must be proposed under the Cleanup Order for the Shipyard Sediment Cleanup remedial footprint. The comment is correct in noting that a Remedial Action Plan would be required. In fact, the Draft Remedial Action Plan for the Shipyard Sediment project has been prepared and is currently out for public review. The methods identified in this Draft Remedial Action Plan would apply to those areas within the CAO remedial footprint and would be implemented through the CAO effort or through the project-specific requirements that would be levied by the District and RWQCB.

The comment also indicates that planning for the project should not be finalized until the Remedial Action Plan is approved by the RWQCB. Given that dredging activities are not likely to commence until later in the year, the Remedial Action Plan may already be approved by the RWQCB. However, as stated in the

COMMENTS

Letter D

C. BAE Should Require Alternative Fuel Tugs and Trucks and Electric Dredging Equipment.

BAE has failed to recognize that there are potentially significant air quality impacts from trucks and tugs completing the project. To mitigate these air quality impacts, BAE should require that all trucks used be hybrid or cleaner alternative fuel trucks and tugs. Further, electric powered dredging equipment should be required for all dredging. D-14

Further, for air emissions that cannot be eliminated, the dischargers must acquire NOx and ozone offsets for the emissions from the project, as the area is currently in "non-attainment" for these air pollutants. D-15

In addition to reducing air pollution in local communities, a requirement for hybrid tugs and trucks would also help reduce the impacts on global climate change. D-16

D. BAE should establish truck staging areas and limit hours and routes for truck traffic to avoid significant noise and traffic impacts on local residents.

The project has the potential to create noise and traffic that would significantly impact local residents. To avoid or mitigate these impacts, BAE should create truck staging areas to avoid congestion and using up residential parking spaces. BAE should also limit the hours during which trucks can haul dredged material and route truck traffic to avoid residential areas. D-17

E. BAE Fails to Mitigate Potentially Significant Impacts to Eastern Pacific Sea Turtles.

Eastern Pacific Sea Turtles are an endangered species found in San Diego Bay. Federal law prohibits anyone from engaging in activities that would "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" with respect to an endangered species. *See* 50 C.F.R 17.3. The EIR admits that if "turtles were to be present during the commencement of construction, they could be harmed by dredging activities…." *See* BAE Pier 4 Replacement EIR at 4.2-20. However, the EIR fails to include measures to prevent harm to endangered sea turtles. Because any harm to the sea turtles would constitute a significant impact, BAE must mitigate these impacts. D-18

F. The EIR Sets the Threshold for Negative Cumulative Significant Environmental Impact too High.

The EIR assumes that regulatory measures will bring the effects of cumulative projects under significant thresholds but fails to properly analyze potential effects from cumulative projects in the San Diego Bay area. *See* BAE Pier 4 Replacement EIR at 5-13. The EIR admits that prior insufficient cumulative impact analyses from past projects have led to piecemeal habitat loss throughout the bay. *See Id.* at 5-12. This prior habitat loss leaves San Diego Bay as a threatened environment. Therefore, BAE must assume a low cumulative impacts significance threshold because "the greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant." *Communities for a* D-19

RESPONSES

Draft EIR, if the CAO is not implemented in a timely manner consistent with the proposed project construction schedule, BAE Systems may initiate the approval process for dredging within these additional areas prior to construction of the new pier. Specifically, these areas are Dredging Sub-Phase B2 (2,006 cubic yards) and Dredging Sub-Phase C (4,250 cubic yards). Planning for this project would occur on a continual basis before demolition or construction activities begin and would not be finalized at the CEQA approval phase. As previously stated, additional project-specific requirements would be levied by the District and RWQCB for those areas within the CAO. The remainder of the dredging areas would not be subject to the Remedial Action Plan. Furthermore, as stated in the Draft Remedial Plan, "cleanup areas below overwater structures will receive a cover layer of clean sand rather than being dredged, owing to accessibility issues and the need to maintain stability of the structure (RAP pg.7)." If the proposed project were not to go forward, the sediments under the existing pier would not be removed.

Response to Comment D-14. The comment incorrectly states that there are potentially significant air quality impacts from trucks and tugs completing the project. Draft EIR Section 4.1, Air Quality, provides construction emissions by phase as well as by peak daily construction emissions (Draft EIR Table 4.1.E and Table 4.1.F). These emissions calculations took into account demolition, bulkhead construction, dredging, and pier construction. Based on the emissions calculations, none of the applicable daily air quality thresholds would be exceeded (Draft EIR pg. 4.1-32); therefore, no potentially significant air quality impacts from the dredging operations would occur.

The comment also requests that all trucks used should be hybrid or cleaner alternative fuel trucks and tugs and that electric powered dredging equipment should be required for all dredging. A fundamental purpose of an EIR is to identify ways in which a proposed project's significant environmental impacts can be mitigated or avoided. However, *CEQA Guidelines* Section 15126.4 (a)(3) states that "mitigation measures are not required for effects which are not found to be significant." A discussion of mitigation measures is required for significant environmental effects only. Therefore, comments on the Draft EIR that claim that "mitigation" must be considered without being linked to a significant effect of the project are incorrect under CEQA. As described above, the proposed project does not result in potentially significant air quality impacts; therefore, no mitigation is required under CEQA.

Furthermore, the use of hybrid dump trucks, tugs, and electric powered dredging equipment is not reasonably feasible primarily due to availability. There is no electric dredge equipment available on the west coast and few hybrid trucks available that would be of sufficient size and capacity to adequately serve the proposed project.

For example, the District is aware of one zero-emission truck delivered for an 18-month pilot program in the Port of Long Beach/Port of Los Angeles area. The Ports of Los Angeles/Long Beach are also currently operating one hybrid tug boat with plans to add another. There is no information to support a conclusion that these or other such zero-emission trucks and tugs are readily available in the SDAB. Also, there is no evidence to support a conclusion that the use of electric dredge equipment would be either available or practical for use in the San Diego Bay. Small, electric remote dredge equipment with a hull construction on 2 foam-filled pontoons can be used in small, enclosed water bodies, but are not appropriate for the nature and scale of the proposed project in the San Diego Bay (www.lwtpithog.com/Specifications/pithog-electric-auger-dredge.htm, accessed July 9, 2012).

If non-remote control dredge equipment were to be used, it would need to be cabled to a source of electricity. Use of an electric cable to power equipment operating in the actively navigated San Diego Bay is neither practical nor advisable. Since these types of equipment are not widely available and/or practical, a requirement to use zero-emission trucks and/or dredging equipment would not be a feasible mitigation, should mitigation have been required.

Response to Comment D-15. The comment asserts that the project must acquire NO_X and ozone offsets for the emissions from the project as the area is currently in non-attainment for these air pollutants. As stated in the Draft EIR, "…the following CEQA significance thresholds for construction and operational emissions have been established by the SDAPCD for the SDAB:

COMMENTS

COMMENT LETTER CONTINUES ON NEXT EVEN-NUMBERED PAGE FOLLOWING

- 137 pounds per day of VOC.
- 250 pounds per day of NO_X.
- 550 pounds per day of CO.
- 100 pounds per day of PM_{10}.
- 250 pounds per day of SO_X.

For $PM_{2.5}$ emissions, no threshold has been established by the District, City, or County of San Diego. However, the EPA recommends 55 lbs./day as a threshold. In the overabundance of caution, the EPA threshold of 55 pounds per day of $PM_{2.5}$ has been used in the air quality analysis. In the SDAB, construction-related and operational-related emissions that exceed any of the emission thresholds are considered to be significant impacts under CEQA" (Draft EIR pg. 4.1-19).

As previously stated, existing thresholds identified by the SDAPCD are not exceeded by the proposed project under construction or operational activities. Furthermore, as stated in the Draft EIR, "…It should be noted that the emissions thresholds were established based on the attainment status of the air basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks" (Draft EIR pg. 4.1-19). Since the construction and operational thresholds take into account the attainment status of the air basin, and because the project emissions are below these thresholds, the project would not require the obtainment of NO_X or ozone offsets.

Response to Comment D-16. The comment states that a requirement for hybrid tugs and trucks would help reduce impacts on global climate change. Please refer to Response to Comment D-14. Please note that the project does not result in potentially significant impacts related to global climate change.

Response to Comment D-17. The comment indicates that the project has the potential to create noise and traffic that would significantly affect local residents. The comment further suggests that a truck staging area and hour limitations be placed on trucks as to avoid residential areas and to prevent significant impacts to residents. As identified in the Draft EIR, "…the closest residences are located along Newton Avenue approximately 1,850 ft from the construction boundary and would be exposed to construction noise levels of up to 60 dBA L_{max}. As the maximum noise level is projected to be 60 dBA or lower, the 12-hour average noise level at these residences would not exceed the City's 75 dBA L_{eq} construction noise threshold" (Draft EIR pg. 4.8-12). In addition, all work would be conducted in conformance with the San Diego Municipal Code requirements, which prohibit construction activity between the hours of 7:00 p.m. and 7:00 a.m. Furthermore, no operational or traffic-related noise would cause significant impacts to these residential areas. A truck staging area would be located within the existing BAE systems shipyard facility and would not take up residential parking areas, as the trucks would be within the shipyard facility. In addition, the proposed project incorporates truck routing consistent with that required for the Shipyard Sediment Project. Project-related construction truck traffic will be required to use Harbor Drive (southbound) to the Civic Center Drive access to Interstate 5 (I-5). Therefore, there are no significant impacts related to truck staging and routing, and no mitigation is required.

Response to Comment D-18. The comment states that the Draft EIR fails to mitigate potentially significant impacts to the eastern Pacific sea turtles. Please refer to Response to Comment C-8.

Response to Comment D-19. The comment states that the Draft EIR must assume a low cumulative impact significance threshold because of the existing environmental problems in the bay, specifically water quality and habitat loss. The comment also states that prior activities have resulted in piecemeal habitat loss and fragmentation in San Diego.

COMMENTS

Letter D

Better Environment v. California Resources Agency , 103 Cal. App. 4th 98 (3d Dist. 2002). The EIR does not lower the bar in the face of existing environmental problems. BAE must lower the threshold for cumulative significance to protect against further water quality and habitat loss in the San Diego Bay. D-19

G. The EIR Inconsistently Describes Biological Mitigation Measure 3 in the Executive Summary.

The Executive Summary describes Mitigation Measure BIO-3 on page 1-35 as requiring that pile driving blows occur 5 minutes apart. While this measure would reduce wildlife acoustic disruption/harassment and potentially reduce vibratory effects on surrounding structure, the EIR does not include it in the Executive Summary's description of BIO-3 on page 1-10 or the full description of BIO-3 on page 4.2-21, included below:

> **BIO-3 Pile Driving.** When performing impact pile driving, the contractor shall commence work with one blow followed by a 1-minute period of no pile driving, prior to commencing full pile driving activities. The purpose of this activity is to encourage turtles and marine mammals in the area to leave the project site prior to commencement of work. A qualified Biological Monitor shall commence monitoring prior to initial pile driving as described above to determine if turtles or marine mammals are in the area. This process shall be repeated if pile driving ceases for a period of greater than an hour.

D-20

Coastkeeper supports a 5-minute break in between pile driving blows to help reduce the impact on wildlife. BAE should correct the EIR to reflect this requirement consistently throughout the document.

H. The EIR Incorrectly Calculates the Amortization of Greenhouse Gas Emissions.

The air quality greenhouse gas emissions in Appendix G 3.5.2 explain that BAE will amortize construction emissions (1280 MT over 2 years CO2e) over the 30-year lifespan of the project, resulting in a 43 MT/year amortization rate. However, on the following page, the EIR incorrectly calculates this rate, accounting for only 640 MT (1 of 2 construction years' emissions) over the 30-year lifespan, and applies a 21 MT/year amortization rate. BAE must correct this to properly understand the impact of greenhouse gas emissions from the project. D-21

I. San Diego Coastkeeper Requests Notice.

San Diego Coastkeeper requests notice of any additional documentation or decisions made regarding this project. D-22

RESPONSES

The comment particularly notes the potential for cumulative impacts to biological resources and to water quality. These topics are addressed in Chapter 5 of the Draft EIR (Volume 2 of the Final EIR). The cumulative analysis was prepared in manner consistent with Section 15230 of the *CEQA Guidelines*, including but not limited to, the use of a list of past, present, and probable future projects, and a definition of the geographic scope of the area affected. Section 15130 allows for the use of previously approved planning documents in the cumulative impact analysis.

As described in Section 5.3.6 of the Draft EIR, the project's contribution to water quality impacts is limited to the construction impacts. Construction activities in bay waters from the proposed project and cumulative projects, such as dredging and pier construction, could cause suspension of sediments that could alter water quality parameters (e.g., dissolved oxygen, nutrients, and turbidity). These effects are generally of short duration, affect small localized areas that are usually not adjacent to each other during construction, and do not occur simultaneously for all projects. Cumulative impacts of such disturbances on water quality would be less than significant because the effects would be dispersed in time and space and are not expected to exceed regulatory water quality standards. See Section 5.3.6 of the Draft EIR for more information with regard to cumulative water quality effects.

The cumulative analysis for biological resources is included in Section 5.3.2 of the Draft EIR. This section includes a description of the San Diego Bay INRMP, which is a long-term strategy document that provides direction and planning guidance for good stewardship of the natural resources within San Diego Bay. The INRMP is a San Diego Bay Ecosystem Plan (SDBEP), a long-term strategy sponsored by two of the major managers of the San Diego Bay: the United States Department of the Navy and the District. The stated intent of the INRMP is to provide direction for the good stewardship that natural resources require, while also supporting the ability of the Navy and District to meet their missions and continue functioning within the bay.

The proposed project will result in short-term construction activity and the replacement of an existing marine industrial pier in an active industrial area of the Bay. Neither the proposed project nor the proposed project in combination with the cumulative projects would result in substantive encroachment into areas containing sensitive biological resources, affect the movement of wildlife species, result in loss or fragmentation of sensitive habitats, or affect the functionality of a planned conservation area. Therefore, cumulative impacts are correctly concluded to be less than significant.

Response to Comment D-20. The comment notes that the Noise section of the Executive Summary describes Mitigation Measure BIO-3 requiring pile driving blows to occur 5 minutes apart and is not reflected in the language of Mitigation Measure BIO-3 in the Executive Summary table or Draft EIR section. The description of requiring pile driving blows to occur 5 minutes apart is a typographical error. Although the comment supports a 5-minute break in between pile driving blows to reduce wildlife impacts, such a frequency in pile driving would not be reasonable or feasible as the installation of piles requires a constant driving motion in order to keep the piles aligned properly. Furthermore, the 5-minute break between pile driving blows would result in the undermining of the structural integrity of the pier, as the piles would be affected by the movement of the Bay water between driving blows and therefore would not be aligned properly. The following correction has been made to the Draft EIR:

> Jetting of new piles during construction activities would generate excessive noise impacts that would be considered a significant impact requiring mitigation. The equipment used to install the piles could be impact pile drivers, vibratory pile drivers, or jet-wash pile installation method. **Mitigation Measure BIO-3** limits the frequency of pile driving ~~by requiring 5-minute breaks between blows)~~ and requires that the contractor commences pile driving work with one blow followed by a 1-minute period of no pile driving, in order to encourage turtles and marine mammals in the area to leave the project site.

Response to Comment D-21. The comment states that the Draft EIR incorrectly calculates the amortization of the greenhouse gas emissions. The comment appears to be referring to the air quality technical report prepared for the proposed project. To clarify, the Air Quality Report is Appendix B of the Draft EIR, not Appendix G. In Appendix B, Section 3.5.2, the comment correctly states a 43 MT/year

COMMENTS

Letter D

Conclusion

San Diego Bay in general, and the shipyard site in particular, already suffers from historic pollution problems. It is critical that BAE take steps to protect the bay from further harm during dredging. We urge that BAE use this opportunity to demonstrate its commitment to bay stewardship by using all feasible best management practices to reduce bay contamination from sediment, prevent further ocean contamination, and avoid disturbing local residents. D-23

Sincerely,

Jill Witkowski
Legal Clinic Director

Thomas Spanos
Student Attorney

amortization rate for construction emissions. The comment also correctly states that on the following page (Table I: Long-Term Annual Operational Greenhouse Gas Emissions), a 21 MT/year amortization rate is cited.

This is a typographical error. Based on the modeling conducted for the construction analysis, it is estimated that the project construction would generate up to 640 metric tons of CO_2 per year for two years. Thus, the 30-year amortized amount is 43 metric tons of CO_2 per year. The table in the Draft EIR Air Quality Section (Table 4.4.E: Annual Combined Construction and Operational Greenhouse Gas Emissions) correctly provides the emissions using the 43 MT/year amortization rate. A potentially significant cumulative impact would occur if the proposed project exceeds the adopted County threshold of 900 $MTCO_2E$ (amortized annual increase). Therefore, there is no change to the EIR conclusion that impacts related to greenhouse gas emission are less than significant.

Response to Comment D-22. This comment requests notice of any additional documentation or decisions made regarding this project. The District will continue to keep San Diego Coastkeeper on the notification list for the project. The comment does not contain any substantive statements or questions about the Draft EIR or the analysis therein. No further response is required.

Response to Comment D-23. The comment requests that BAE Systems use all the feasible best management practices to reduce bay contamination from sediment, prevent further ocean contamination, and avoid disturbing local residents. Please refer to Response to Comment D-3 and Responses to Comments D-5 through D-8 relating to bay contamination from sediment, Response to Comment D-12 relating to ocean disposal of sediments, and Response to Comment D-17 relating to traffic and noise impacts.

COMMENTS

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5.7 LETTER E: UNITED STATES FISH AND WILDLIFE SERVICE

Commenter: Karen Goebel, Assistant Field Supervisor

Date: June 22, 2012

COMMENTS

Letter E

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011

RECEIVED
LAND USE PLANNING
JUN 25 2012

JUN 22 2012

In Reply Refer To:
FWS-SDG-12B0155-12TA0373

Mr. Eric Munoz, Coastal Planner
Land Use Planning Department
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92101

Subject: Comments on the San Diego Unified Port District's Draft Environmental Impact Report for the BAE Systems Pier 4 Replacement Project, San Diego County, California (UPD# EIR-2012-01)

Dear Mr. Munoz:

The U.S. Fish and Wildlife Service (Service) has reviewed the San Diego Unified Port District's (Port) Draft Environmental Impact Report (DEIR) for the BAE Systems Pier 4 Replacement Project (Project), in San Diego County, California. We previously provided comments in our letter dated April 10, 2012, on the Notice of Preparation (NOP) of a DEIR for the Project. The enclosed comments are based on information provided in the DEIR and the Service's knowledge of sensitive and declining species and their habitats. **E-1**

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). **E-2**

The Project is located along the eastern shoreline of central San Diego Bay (Bay) in a private shipyard owned by BAE Systems. The Project proposes to replace the 52-year old Pier 4 with a new pier that will enable BAE Systems to service the future needs of commercial and Navy vessels at their existing shipyard facility. The proposed Pier 4 would be reconfigured and larger than the existing Pier 4 in order to provide space for a gantry crane, material laydown areas, vehicular movement, a dividing wall, and a utility apron. A mooring dolphin would also be constructed approximately 140 feet (ft) offshore of the west end of the new Pier 4 in order to accommodate ships longer than the pier. The Project also proposes to remove the remaining portions of Pier 5, which is an unused pier that has been partially demolished to offset impacts for a previous project. The existing bulkhead and rip rap revetments would be removed and replaced with a new three-section bulkhead. **E-3**

RESPONSES

RESPONSE TO LETTER E

United States Fish and Wildlife Service

Commenter: Karen Goebel, Assistant Field Supervisor

Date: June 22, 2012

Response to Comment E-1: The comment is introductory to other comments in the letter and further notes that the U.S. Fish and Wildlife Service (USFWS) provided comments on the Notice of Preparation (NOP) of a Draft EIR for the project during the public scoping period. Please see Section 2.4 and Table 2.A of the Draft EIR (Volume 2 of the Final EIR) for a summary of information continued in the scoping comment letter. A copy of the letter is included in Appendix A of the Draft EIR (Volume 3 of the Final EIR). The topics raised in the scoping letter are addressed in Draft EIR. Specifically, a discussion regarding the California least tern is included in Section 4.2 (Biological Resources), and water quality impacts associated with the dredging of contaminated sediment is included in Section 4.5 (Hazards and Hazardous Materials) and Section 4.6 (Hydrology and Water Quality). The comment does not contain any substantive statements or questions about the Draft EIR or the analysis therein. Therefore, no further response is necessary.

Response to Comment E-2: The comment provides background information regarding the jurisdiction of the USFWS, including but not limited to administration of the Federal Endangered Species Act (FESA). The comment does not contain any substantive statements or questions about the Draft EIR or the analysis therein. Therefore, no further response is necessary.

Response to Comment E-3: The comment provides a summary description of the proposed project, and is not a comment on the environmental analysis contained in the Draft EIR. The full project description is included as Chapter 3.0 of the Draft EIR (Volume 2 of the Final EIR).

COMMENTS

Letter E

The Project would also dredge approximately 41, 908 cubic yards (cy) of sediments to deepen 4.72 acres of the shipyard waters from existing depths between -29 and -33 ft MLLW to depths between -35 and -37 ft MLLW. Some of the sediments appear to be suitable for aquatic disposal based on preliminary testing, while other sediments are too contaminated for aquatic disposal and subject to an existing Cleanup and Abatement Order from the Regional Water Quality Control Board that requires upland disposal. **E-3**

Our main concern regarding the Project is potential impacts to the federally endangered California least tern (*Sternula antillarum browni*; "least tern"). All of the Bay is within foraging distance of least tern nesting sites in the Bay and on the Silver Strand beaches. Least terns forage in open water habitat that is not obstructed by structures (e.g., piers, docks, or boats), where suitable prey are visible in the water column. However, least terns have been observed to forage more heavily in areas less than 20 ft in depth (Baird 1997; Massey and Atwood 1982). The Project location is considered least tern foraging habitat since it is within the Bay and portions of it are less than 20 ft deep and occupied by eelgrass, which provides nursery habitat for least tern prey species. **E-4**

After accounting for the removal of the rip rap revetment and remaining portions of Pier 5, the Project would result in a net increase of 7,969 square feet (sf) in bay coverage. In evaluating impacts from past projects, the Service has consistently identified the surface waters of the Bay as important for the general ecology of the Bay and as foraging habitat for sight-feeding birds that plunge-dive to forage, including the least tern. Covering surface waters with structures results in loss of least tern foraging habitat because these sight-feeding birds cannot see their prey under the structures or plunge-dive through the structures to catch their prey. **E-5**

If done during the breeding season (April 1 to September 15), the proposed in-water construction may affect least terns in a variety of ways by inducing changes in water clarity, with associated effects on prey species and on least tern foraging behavior or success; increasing noise and human disturbance near foraging and nesting sites due to equipment operation; and releasing contaminants into the water column. In-water construction may also result in fish mortality due to reduced oxygen levels that could reduce least tern prey availability. Recent studies indicate a general reduction in least tern productivity and/or clutch size (Keane et al. 2010; Shuetz 2011), which may be due to reduced food availability and density-dependent competition (Shuetz 2011). If this is the case, further reduction in food availability from in-water construction during the breeding season could cause further reduction in least tern productivity and/or clutch size, especially for relatively larger colonies. **E-6**

The following comments address our concerns about the Project and its analysis in the DEIR: **E-7**

1. The DEIR does not specify the time of year or the length of time proposed for the in-water construction associated with the Project. Mitigation Measure BIO-6 addresses impacts to least tern foraging behavior that may occur during pile driving, but does not

RESPONSES

Response to Comment E-4: The comment identifies potential impacts to the federally endangered California least tern as the agency's primary concern. The comment also notes that California least terns have been observed to forage more heavily in areas less than 20 feet in depth. The comment is correct in noting that portions of the project footprint are located in areas less than 20 feet deep. The shallow areas occur along the shoreline. (Section 4.2.2 of the Draft EIR states: "The slope of the bottom is relatively steep along the bulkhead wall and the project site extends from a high elevation of approximately 0 feet mean lower low water (MLLW) to a depth of approximately -30 feet MLLW at the bayward edge of Pier 4 adjacent to the main channel.") It is also noted in Section 4.2.2 that, according to the INRMP, deep subtidal habitat is considered to be deeper than -20 feet MLLW, moderately deep subtidal habitat is considered to be between -12 and -20 feet MLLW, and shallow subtidal habitat is considered to be between -2.2 and -12 feet MLLW (page 4.2-3 of the Draft EIR).

Baird et al. (1997) concluded that water depth was the primary abiotic factor correlated with selection of foraging locations by California least terns. The Baird et al. multi-year study indicated that California least terns prefer to forage in areas between depths of 6.7 to 7.8 meters (21 to 25 feet). Within the project site, shallow subtidal habitat (between -2 to -12 feet MLLW, according to the INRMP) are located in a narrow band adjacent to the bulkhead shoreline. The project construction area occurs in deeper waters. Specifically, the proposed dredge area has a current water depth of -29 to -33 feet MLLW. The small area of shallow water at the location where the existing Pier 4 meets the bulkhead is currently covered by the pier. As such, this area is not currently available to foraging California least terns and pier removal and replacement results in no net change to shallow subtidal habitat in this area.

Eelgrass occurs as several small patches along the bulkhead shoreline. None of the eelgrass is within the project footprint. Eelgrass is not anticipated to be affected by project construction or operation. However, because of the proximity of eelgrass, several protective measures have been incorporated into the project, including staking boundaries of eelgrass beds and communication with contractors to ensure areas with eelgrass are avoided during bulkhead replacement and pier removals. Additionally, pre- and post-construction eelgrass surveys shall be performed to identify any unintended impacts to eelgrass, should they occur.

The comment is not correct when it states that portion of the project location is occupied by eelgrass. There is no eelgrass in the project footprint. There is eelgrass present near the project limits, and therefore, protective measures are identified as mitigation to protect the off-site eelgrass. As stated in Section 4.2.5.2 of the Draft EIR, "The proposed project would not result in direct impacts to eelgrass habitat." Furthermore, as noted in Table 4.2.D: Bay Fill, Bay Coverage, and Pilings, no impacts to eelgrass are anticipated. Please see Section 4.2 of the Draft EIR (Volume 2 of the Final EIR) for more information.

Response to Comment E-5: The comment notes that the proposed project would result in a net increase in bay coverage, which represents a loss of California least tern foraging habitat. The comment summarizes information included in the Draft EIR and introduces comments that follow, and is not a comment on the environmental analysis contained therein. Accordingly, no further response is required.

Response to Comment E-6: The comment pertains to in-water construction during the breeding season for California least terns, and proposes that the construction work conducted during the California least tern breeding season (April 1 to September 15) may affect California least terns as a result of changes in turbidity, water clarity, noise, and water quality conditions during construction. The comment references information from two studies indicating that on a statewide basis, productivity and/or clutch size of terns is declining.

The two studies referenced by the commenter (Keane et al. 2010 and Shuetz 2011) are population status review papers, not papers that investigate the effects of in-water construction on California least terns. They have been referenced to suggest that in-concert with present statewide declines in productivity and clutch size, in-water construction activities may result in further declines in the species. However, contrary to the heightened concern raised in the comment is the recognition made by the USFWS in its most recent 5-year status (2006) review summary and evaluation of the species that noted that reproductive

COMMENTS

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rates for 2005 were considerably lower (0.23–0.36 fledglings/pair) than the recovery plan recommendations of 1.0 fledglings/pair, yet populations continue to rise, suggesting that the higher reproductive success is not required to achieve recovery of the species.[1] Further, the California least tern population has been on the rise since the 1973 low of 624 pairs. By 2005 there were over 7,100 pairs of California least terns and in 2006 the USFWS 5-year status review recommended down-listing the species from endangered to threatened species status (USFWS 2006). While the specific status of terns can be viewed in multiple ways depending upon the metrics presented, the focus of the project analysis under CEQA is on potential for adverse effects and significance of impacts should they occur.

As indicated in the Draft EIR, it is not anticipated that project construction during the California least tern nesting season (April 1 through September 15) would have a significant impact. To elaborate further on the determination, the analysis is expanded as follows:

1) California least terns nest at multiple locations within San Diego Bay. The nearest nesting colony to the proposed project site is at Delta Beach, NAB Coronado, along the Silver Strand approximately 1.8 miles to the southwest of the project site. Atwood and Minsky (1983) determined that 60 percent or more of foraging forays were within two miles of nesting colonies. This has been confirmed by studies completed in San Francisco Bay (Steinbeck et al. 2005), which indicate that 91 percent of California least terns observed foraging were within 3.5 miles of the Alameda Point colony, and approximately 50 percent of total observations were within two miles of the colony. Baird et al. (1997) further determined that California least terns from the Delta Beach, NAB Coronado colony forage not only within San Diego Bay but also extensively along the shoreline of Pacific Ocean, depending on factors such as food availability and nesting stage. These studies all suggest that the project site, which is within an active shipyard nearly two miles from the nearest nesting colony, does not represent high quality foraging habitat for California least tern.
2) The project area is within an active shipyard. Vessels travel into and out of the area on a regular basis. Construction equipment is regularly utilized to repair ships and equipment. California least terns entering the shipyard are subject to human disturbance and equipment operation on a regular basis and project construction does not represent a significant change from baseline conditions within the shipyard.
3) The effects of water turbidity of California least tern foraging behavior have been studied, but conclusions are mixed. Recent literature regarding tern species and turbidity have been summarized in Burton and Terrill (2010) as follows:

> "Becker et al. (1985) studied the foraging success of Common Terns (*Sterna hirundo*) and found that increased turbidity resulted in limited feeding efficiency. These observations however were made during a period of intense weather involving extended periods of heavy rain and high winds. The authors noted the cause of decreased foraging success may also have been due to high winds, and loss of visibility caused by raindrops hitting the water surface. Furthermore, decreased foraging success could have been due to the expected movement of prey species to deeper waters, avoiding the choppy surface water. Likewise Benninkmeijer et al. (2002) reported that for little terns, prey mass, capture rate, and therefore food intake rate were higher in clearer water. They reported similar patterns for Sandwich Terns (*S. sandwicensis*) and Royal Terns (*S. maxima*), but also noted that water clarity had a more pronounced effect on the size of fish that were captured than on the capture rate. Nonetheless, overall food intake (g/hr) was higher in clearer water.
>
> Cyrus (1991) described the influence of turbidity resulting from river outflow, on the foraging behavior of Little Terns. He observed terns foraging at the margin between sediment-laden river water and the clear marine water, and found that terns were focused on fish that had concentrated among vegetative debris trapped between opposing

[1] U.S. Fish and Wildlife Service (2006) California least tern, *Sternula antillarum browni*, 5-year review summary and evaluation. U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, Carlsbad, California.

COMMENTS

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currents. He also reported that Little Terns appeared to forage within turbid and clear water on either side of the margin, with equal frequencies.

In contrast, Haney & Stone (1988) found that least terns were more frequently found in more turbid water than would be expected were they distributed randomly. However these results are probably more a function of the nearshore/offshore turbidity gradient, as least terns are known to feed at more inshore locations, at least while breeding (Atwood and Minsky 1983). Their results do however suggest that least terns are capable of foraging in turbid water, as do the observations of Atwood and Minsky (1983) who noted that least terns often feed immediately offshore of the wave crash zone.

Similar to the findings of Haney & Stone (1988), Common Terns show an apparent preference for turbid water (Safina & Burger 1988), as do Forster's Terns (*S. forsteri*) foraging on Monterey Bay (Henkel 2006). There is also some evidence that turbidity may provide some advantage to plunge divers by attracting juvenile fish seeking refuge from fish predators (Blaber and Blaber 1980). Fish then tend to rise to the surface in more turbid waters making them more vulnerable to aerial predation (Safina & Burger 1988).

There is evidence that increased turbidity resulting from dredging operations could potentially decrease foraging success of least terns in the Bay, as a result of decreased visibility. There is also evidence that higher turbidity may benefit least tern foraging by concentrating prey in the surface layer. Given the relatively short duration of turbidity plumes generated by dredging (Ruffin 1998), overall impacts resulting from visual impairment of foraging least terns may not be significant."

There is no consensus within the scientific community regarding least tern foraging behavior/success and turbidity. Further, it is worth noting that within San Diego Bay, 6 of the 8 least tern colony sites, supporting 82 percent of the San Diego Bay terns in 2005 (USFWS 2006), occur adjacent to waters of South and South-Central San Diego Bay that consistently support higher turbidity levels than the waters at the proposed project site and receive substantially more foraging activity by California least terns than do the waters of the industrialized shoreline around the project site.

In addition to turbidity, the commenter noted concerns regarding other potential indirect impacts to California least tern from dredging, such as increased turbidity and release of contaminants during dredging potentially affecting fish prey species. However, studies have shown that fish have the ability to avoid and enter turbid waters and are expected to avoid areas where particulate concentrations become too high. Mous (2000) found, for example, that a species of smelt aggregated in the top of the water column in turbid waters and occurred at deeper depths when the water was clear. The short duration of work and small area of dredging for the proposed project is not anticipated to result in fish kills from contaminants or reduced dissolved oxygen (DO) levels. Mobile prey species are anticipated to move out of the area or concentrate near the surface during dredging when turbidity levels rise substantially or DO levels fall. A silt curtain is proposed to be utilized to contain construction-related turbidity, depressed DO levels, and contaminants suspended during the dredging activities. This would further reduce potential impacts on prey species distribution.

The recent demographic study of California least terns (Shuetz 2011) indicates that, while overall size of the breeding population has increased by 350 percent, there is a general decline in clutch size and fledgling productivity (defined as fledglings per pair) in the past ten years. Reasons cited for this may include reduced prey availability, density-dependent competition (where terns are competing with each other for available food), or age-dependent changes reproduction (such as the fact that older birds lay more eggs and successfully rear more chicks than do young birds) as the age of the total population fluctuates over time. All of these hypotheses have merit and should be investigated in order to refine long-term management and recovery goals for the California least tern population. The fact that population levels continue to increase in spite of reduced reproductive success has been discussed as a reason to "revisit and revise the current California least tern recovery plan" (USFWS 2006). While the Shuetz 2011 study documents a change in reproductive success, it does not provide any coupling between observed declines and causative agents. It also does not make an extended bridge to factors such as noise

COMMENTS

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generation and dredging resulting in potential effects on terns, presumably through decreased prey availability.

In addition to the lack of data suggesting an impact of localized turbidity and noise generation on terns, the 5-year species review completed by the USFWS focuses its recommendation for future actions on four points: 1) revisit and revise the current recovery plan, 2) continue management of existing nest sites, 3) monitoring of nest sites, and 4) creation of new nest sites and expansion of existing sites. The 5-year review further does not mention in-water construction activities as a stressor on the species, but rather focuses on tern colony management.

The proposed project involves dredging and construction in a marine industrial use area of the San Diego Bay. Mitigation measures in the Draft EIR (BIO-5 and HAZ-6) require silt/turbidity curtains and other practices to limit the extent of turbidity. Also the dredging and construction activities will occur in an approximately 5-acre area of the approximately 19-square mile water body; therefore, substantial open water areas of the Bay will remain available for foraging activities. Furthermore, BAE Systems does not intend to conduct dredging during the breeding season. In sum, the District finds that impact of localized turbidity and noise generation during project dredging and construction will not have a significant impact to California least terns with mitigation incorporated into the project.

Response to Comment E-7: The comment notes that the Draft EIR does not specify the time of year of the length of time proposed for the in-water construction. The comment expresses the view that all in-water construction should take place outside of the California least tern breeding season. The District recognizes the USFWS view on the timing of in-water construction and notes that, while avoidance of the breeding season is desirable, in some cases permits have been issued for in-water work for other projects during the breeding season. It is anticipated that in-water construction is only proposed outside of the California least tern breeding season. However, in the event that impact hammer pile driving construction is required during the California least tern breeding season, Mitigation Measure BIO-5 and BIO-6 would address impacts to the California least tern. Mitigation Measure BIO-6 states that a qualified Biological Monitor shall be retained to conduct monitoring within 500 feet of construction activities. Mitigation Measure BIO-5 states that regardless of the timing of the upland disposal dredging, the use of turbidity curtains shall be required in order to minimize the area of the Bay in which visibility of prey by terns is obstructed. The comment further notes that consultation under the FESA may be initiated by the USACE if in-water construction is planned during the California least tern breeding season.

The District found that the potentially significant impacts of project construction under CEQA pertained to the use of hammer pile driving in the water. This is because, as described above, the project area is within an active shipyard. Vessels travel into and out of the area on a regular basis. Construction equipment is regularly utilized to repair ships and equipment. Terns entering the shipyard are subject to human disturbance and equipment operation on a regular basis and project construction does not represent a significant change from baseline conditions within the shipyard.

It is further noted that BAE Systems does not intend to conduct dredging during the breeding season, and anticipates that other in-water construction-related activities would occur wholly or largely outside of the breeding season. BAE Systems has committed to conducting no dredging during the breeding season unless it is specifically authorized by the USFWS. BAE Systems will stage construction activities so that the in-water improvements are initiated prior to the breeding season, the landside improvements are implemented during the breeding season, and in-water improvements are completed after the end of the breeding season.

The District notes that other effects noted in the comment will be addressed during the consultation process, should one be required. The proposed project will require a CWA Section 404 permit (issued by USACE) and as part of this permit process, the USACE must determine if the activities may affect California least terns. If the USACE determines that the activities may affect California least terns, a Section 7 consultation between the USACE and USFWS would be required. Through consultation, the USFWS would be charged with determining if the activities would result in take of terns and any

COMMENTS

Letter E

address impacts from other in-water construction such as dredging. All in-water construction, including dredging, pier demolition, and pier construction should take place outside the least tern breeding season to avoid impacts to this federally listed species. Consultation under the Act may be necessary if in-water construction is planned during the least tern breeding season. **E-7**

2. Our NOP comments included several options to mitigate bay coverage impacts to least tern foraging habitat, none of which were evaluated in the DEIR. Instead, the DEIR proposes to mitigate bay coverage by creating fish enhancement structures using the existing Pier 4 and Pier 5 pilings and pier platforms. One of these structures is proposed to be located offshore of Imperial Beach, and the other structure would be located either adjacent to the planned Navy Pier 12 reef or adjacent to the existing artificial reef at the Coronado Island Marriott Resort. **E-8**

   The fish species that generally benefit from fish enhancement structures are not least tern prey species, which instead use eelgrass and saltmarsh as nursery habitat and open water as adults. Because of this, the Service does not consider fish enhancement structures to be an appropriate method of mitigating bay coverage impacts to least tern foraging habitat. Therefore, the final EIR should analyze following options to mitigate bay coverage impacts to least tern foraging habitat: **E-9**

   a. Remove structures covering the Bay to avoid a net loss of available foraging habitat;

   b. Remove upland fill from the Bay to avoid a net loss of available foraging habitat;

   c. Shallow-up deep, subtidal habitat to shallow, subtidal habitat to create more preferred foraging habitat;

   d. Create eelgrass habitat to enhance fish nursery habitat and thus prey populations for the tern;

   e. Remove non-functional rip rap or debris that occurs in intertidal or shallow subtidal habitat to enhance nursery habitat for tern prey and create more preferred foraging habitat;

   f. Conduct a combination of the measures listed above that total the net area of increase in bay coverage that results from the Project.

3. The DEIR states that the pier piles to be used for the fish enhancement structures have been chemically treated, but does not specify the chemicals with which they were treated. The Service does not support the placement of materials into the Bay that could **E-10**

reasonable and prudent measures that could be undertaken to minimize or mitigate these potential effects.

Response to Comment E-8: The commenter noted that NOP comments submitted recommended several options to mitigate bay coverage impacts to California least tern foraging habitat and that these options were not evaluated in the Draft EIR. Instead, the Draft EIR includes mitigation that involves the reuse of pier demolition materials to construct fish enhancement structures offshore of Imperial Beach and adjacent to the Navy Pier 12 FES and existing artificial reefs at the Coronado Island Marriott Resort.

See response to comment E-9 for more discussion on alternative mitigation options considered. As discussed in response to comment E-9, a possible mitigation scenario involves an expanded lease for creation of a reef, with or without an eelgrass habitat component. Alternatively, bay coverage credits, or eelgrass mitigation area may be acquired by the applicant from the District, from prior bay coverage removals and surplus eelgrass restoration that has been developed by the District. One possible mitigation site is located adjacent to the shoreward reef south of Le Meridien (now the Coronado Island Marriott Resort) adjacent to the Pier 12 FES presently being constructed by the Navy. This reef alternative could be constructed as a crescent reef supporting expanded eelgrass habitat as well as reef habitat. However, as described in response to comment E-9 and in Mitigation Measure BIO-7, there are several options for addressing bay coverage impacts, including the purchase or transfer of credits, subject to the review and approval of the District and other agencies as appropriate including but not limited to the RWQCB and USACE.

Response to Comment E-9: The comment suggests six possible mitigation measures that should be considered to address bay coverage impacts:

1. Remove structures covering the Bay to avoid a net loss of available foraging habitat;
2. Remove upland fill from the Bay to avoid a net loss of available foraging habitat;
3. Shallow-up deep, subtidal habitat to shallow, subtidal habitat to create more preferred foraging habitat;
4. Create eelgrass habitat to enhance fish nursery habitat and thus prey populations for the tern;
5. Remove non-functional riprap or debris that occurs in intertidal or shallow subtidal habitat to enhance nursery habitat for tern prey and create more preferred foraging habitat; and
6. Conduct a combination of the measures listed above that total the net area of increase in bay coverage that results from the project.

The USFWS further objected to the creation of a fish enhancement structure because it would not create eelgrass and salt marsh habitat that would support the fish species that would be California least tern prey.

Mitigation Measure BIO-7 of the Draft EIR includes a suite of mitigation options to offset bay coverage impacts. The options included the following potential measures:

1. Removal of similar structures within the bay (e.g., dock removal);
2. Removal of upland fill from the bay;
3. Creation of eelgrass habitat and/or reef structures in presently unvegetated bottom areas;
4. Purchase of credits from a mitigation bank (for fill removal or enhancement such as eelgrass); and
5. Removal of non-functional riprap or debris from intertidal or shallow subtidal habitat in the bay to improve suitability for use by birds and fish.

The Draft EIR recognized that the mitigation could be a blend of the identified measures to achieve the total bay coverage area on a 1:1 basis (i.e., option 6 suggested by the commenter). The Draft EIR

COMMENTS

COMMENT LETTER CONTINUES ON NEXT EVEN-NUMBERED PAGE FOLLOWING

erroneously omitted the option to shallow-up deep, subtidal habitat to shallow, subtidal habitat to create more preferred foraging habitat. This option has been added to Mitigation Measure BIO-7. The mitigation measure includes two other alternatives not identified by the commenter, but for which past mitigation and regulatory practices have accepted as viable mitigation options for comparable bay coverage impacts. These may include the use of reefs (fish enhancement structures) and purchase of mitigation credits from previously implemented measures such as outlined as suitable mitigation. These additional mitigation options have been included as they have an established record of use and are proven methods to achieve desired enhancement benefits.

A primary conclusion of the multi-year California least tern foraging study by Baird et al. (1997) was that California least terns often forage next to structures such as sea walls and piers as it has been demonstrated that schooling fish often congregate around such features making them easier prey and their presence in an area more predictable. Within the Baird et al. study, on every survey California least terns were observed foraging near active or abandoned piers. The authors suggest that creation of artificial reefs would serve to test the idea that California least tern prey congregate there. This test was performed by the Navy commencing with construction of four fish enhancement structures in 1997. Pondella et al. (2006) monitored the constructed FES at the Navy Eelgrass Mitigation Site 5 (NEMS-5) for a 5-year period and determined that structures were utilized by a host of fish species and size classes providing both an attraction as well as production feature with both adults and juvenile fish increasing throughout the length of the study as the reefs matured.[1] In prior investigations, completed on the Le Meridien reef located in central bay, the attraction of the structure to schooling fish, particularly topsmelt and deep-bodied anchovy has been noted during completion of comparative fish utilization studies that examined eelgrass, reef, and unvegetated mud bottom as well as the interface areas of eelgrass-reef, eelgrass-mud, and reef-mud. The conclusions of this study were that both reefs and eelgrass support substantially higher fish richness and abundance than mud bottom while the interface of eelgrass-reef appears to support even higher abundance of fish (B. Hoffman, unpublished data).

Unlike the observations that tern foraging increases near structures, Baird et al. (1997) noted that their studies did not reveal a tendency of California least terns to favor foraging in eelgrass beds of San Diego Bay. Over four years, eelgrass habitats were equally preferred to non-eelgrass habitats. The authors note that eelgrass provides an important nursery for larval prey fish, which would subsequently support fish in the small size classes that are essential to support California least tern foraging. Therefore, creation of new eelgrass should be considered a means to provide a nursery for prey species, rather than to provide new forage areas for California least terns as mitigation for loss of forage areas from bay coverage. Conversely, reefs provide a combination of production and attraction thus adding to both the abundance and availability of forage fish.

The inclusion of reefs in the suite of mitigation options to offset bay coverage has been based on the recognition of the enhancement values these features provide. When considering the various mitigation options, the Draft EIR and biological technical report discussed various options and determined several to be infeasible. Merkel & Associates, Inc. explored opportunities to remove existing debris to the northwest of BAE Systems Pier 1. It was determined that the amount of rubble was insubstantial (only hundreds of square feet). Additionally, the eelgrass in this area, while persistent, fluctuates in area and coverage. As such, it would be difficult to implement a successful eelgrass restoration effort in this area. Furthermore, the idea of installing artificial reefs in on-site areas of suitable water circulation, water clarity, and lacking ability to support eelgrass habitat were explored. The outermost portions of the BAE Systems shipyard, adjacent to the main channel, support various mooring dolphin and pier end structures. It was thought that these areas might provide opportunities to support reef units within the upper water column. This could enhance the structural complexity, and thus ecological value of the existing structures, which are presently known to support aggregations of schooling fish that attract predatory fish and birds. While this option would be very costly but feasible, it would be too small, in combination with debris removals on the leasehold to meet the mitigation needs. Therefore, it was abandoned in favor of a plan that could fully meet the mitigation needs of the project.

[1] Pondella, D.J. II, L.G. Allen, M.T. Craig, and B. Gintert (2006) Evaluation of Eelgrass Mitigation and Fisheries Enhancement Structures in San Diego Bay, California. Bul. Mar. Sci. 78(1): 115-131.

COMMENTS

Letter E

potentially leach contaminants into the water. For example, if the pier piles are creosote-treated, they should be disposed of properly rather than used to create fish enhancement structures in the Bay. E-10

4. Section 3.4.6 of the DEIR indicates that the current minimum depth of the dredge area is -29 ft MLLW. However, Figure 4.2.1 indicates that the current minimum depth of a portion of the dredge area is approximately -10 ft MLLW. The final EIR should clarify this apparent discrepancy. Deepening shallow subtidal areas currently less than -20 ft MLLW may result in the loss of primary productivity and, as a result, decrease their ecological function and species diversity. However, the DEIR does not adequately analyze the impact of converting shallow subtidal to deep subtidal habitat. The final EIR should include an analysis of this impact and how it would be mitigated. E-11

5. The DEIR states that approximately 768 sf of eelgrass occurs within the Project footprint. The DEIR proposes measures to avoid impacts to eelgrass, as well as pre- and post-construction surveys to quantify any impacts that result from the Project. However, a mitigation plan approved by the U.S. Army Corps of Engineers, National Marine Fisheries Service, and the Service should be incorporated into the Project prior to initiation of construction. Some form of financial assurance for mitigation and monitoring should also be provided should impacts to eelgrass occur. E-12

We appreciate the opportunity to provide comments on this project. Should you have any questions regarding this letter, please contact Lauren Kershek of my staff at 760-431-9440.

Sincerely,

Karen A. Goebel
Assistant Field Supervisor E-13

cc:
Loni Adams, CDFG
Eric Chavez, NMFS

RESPONSES

At present, all bay coverage mitigation options remain as potential solutions; however, those calling for shallowing deep water to shallow water, removing additional bay coverage, or excavating uplands are not considered to be feasible. Under Public Resources Code Section 21004 and *CEQA Guidelines* Section 15040, mitigation measures that are beyond the powers conferred by law on lead and responsible agencies are legally infeasible. "Feasible" is defined as capable of being accomplished in a reasonable time, considering various matters, including legal factors. The District is responsible for the development and management of the Tideland Trust properties to their highest and best use for the maximum public benefit. The District has approximately 600 tenants with an extensive array of businesses surrounding San Diego Bay. These businesses include hotels, marinas, restaurants, shipyards, and manufacturing enterprises (http://www.portofsandiego.org/real-estate.html, July 2, 2012). Active tenants in good standing have the power to decide when existing structures and other tenant improvements will be removed. BAE Systems is removing its only nonfunctional over-water structure as part of the proposed project the remnant stub of Pier 5. There are no other structures, upland fill, existing riprap, or debris within the BAE Systems leasehold that are suitable for removal, as these existing improvements are critical to the ongoing function of the leasehold as an active ship repair and maintenance facility. Furthermore, the District staff is not aware of any tenants that are currently willing and able to allow the removal of structures and/or upland fill, or to fill deep water to create shallow water for the purpose of the Pier 4 Replacement project. The District is not legally able to impose a requirement tenants remove existing improvements that do not pose a safety hazard and are in compliance with their lease agreements. Therefore, a mitigation measure that requires the removal of structures not within the control of the District or BAE Systems is likewise not legally defensible.

A possible mitigation scenario involves an expanded lease for creation of a reef, with or without an eelgrass habitat component. Alternatively, bay coverage credits, or eelgrass mitigation area may be acquired by the applicant from the District, from prior bay coverage removals and surplus eelgrass restoration that has been developed by the District. One possible mitigation site is located adjacent to the shoreward reef south of Le Meridien (now the Coronado Island Marriott Resort) adjacent to the Pier 12 FES presently being constructed by the Navy. This reef alternative could be constructed as a crescent reef supporting expanded eelgrass habitat as well as reef habitat. However, as described above and in Mitigation Measure BIO-7, there are several options for addressing bay coverage impacts, including the purchase or transfer of credits, subject to the review and approval of the District and other agencies as appropriate including but not limited to the RWQCB and USACE.

Response to Comment E-10: The comment notes that, if existing pier piles have been chemically treated, they may not be appropriate for reuse in the Bay. The District concurs with the comment. Pier pilings will be evaluated prior to reuse and will be disposed of in an appropriate landfill if not suitable for use within the Bay.

Response to Comment E-11: The comment notes that Section 3.4.6 of the Draft EIR indicates that the current minimum depth of the dredge area is -29 feet MLLW, and that Figure 4.2.1 indicates that the current minimum depth of a portion of the dredge area is approximately -10 feet MLLW. The comment is correct. The text in Section 3.4.6 of the Draft EIR states:

> "The post-dredge condition will be –35 ft MLLW, with between 0 and 2 ft over-depth. So, the post-dredge condition is expected to be between –35 ft and –37 ft MLLW. The existing condition ranges from –29 ft. to –33 ft MLLW."

This text is clarified and updated in the Final EIR (through this Response to Comment and list of Errata) to read (change noted in underscore):

> "The post-dredge condition will be –35 ft MLLW, with between 0 and 2 ft over-depth. So, the post-dredge condition is expected to be between –35 ft and –37 ft MLLW. The existing condition ranges from –29 ft. to –33 ft MLLW for the majority of the dredge footprint, however, the area adjacent to the shoreline is more shallow with depths ranging from 0 to 20 feet located in a narrow band adjacent to the bulkhead shoreline."

COMMENTS

Letter E

LITERATURE CITED

Baird, P. H. 1997. Foraging of the California least tern in San Diego Bay 1993-1996. Final Report. California State University Long Beach. 90840. 178pp.

Keane, K., Langdon, S., and N. Mudry. 2010. Status of the endangered California least tern: population trends and indicators for the future. Summary of Presentation Poster, World Seabird Conference, September 2010.

Massey, B. W. and J. L. Atwood. 1982. Application of ecological information to habitat management for the California least tern. Progress Report No. 4. Prepared for the Department of the Interior, Fish and Wildlife Service, Laguna Niguel, California.

Schuetz, J. 2011. Reproductive Declines in an Endangered Seabird: Cause for Concern or Signs of Conservation Success? PLoS ONE 6(5): e19489. doi:10.1371/journal.pone.00194

E-14

RESPONSES

Response to Comment E-12: The comment states that the Draft EIR states that approximately 768 square feet of eelgrass occur within the project footprint; however, this statement is not correct. Page 4.2-8 of the Draft EIR, states that there is existing eelgrass in the project area. The text refers to the study area for biological resources, which is larger than the project "footprint" of proposed improvements (including dredging). There is no eelgrass currently within the project footprint. Because of proximity of eelgrass to the proposed work, measures have been identified to avoid impacts to eelgrass while completing the work. With effective implementation of the measures, impacts to eelgrass are not anticipated and thus would not require mitigation. As such, no separate mitigation plan or financial assurances are required.

Response to Comment E-13: The comment is a conclusion to other comments in the letter. The comment does not contain any substantive statements or questions about the Draft EIR or the analysis therein. Therefore, no further response is necessary.

Response to Comment E-14: The comment is a list of the literature cited in the comment letter. The comment does not contain any substantive statements or questions about the Draft EIR or the analysis therein; therefore, no further response is necessary.

COMMENTS

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Section 6.0

Mitigation Monitoring and Reporting Program

6.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code (PRC) Section 21081.6 (enacted by the passage of Assembly Bill 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.
- The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.
- A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- Prior to the close of the public review period for a Draft Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND), a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures that mitigate impacts to resources that are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

6.2 MITIGATION MONITORING PROCEDURES

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in compliance with California Environmental Quality Act (CEQA) PRC Section 21081.6. It describes the requirements and procedures to be followed by the District to ensure that all mitigation measures adopted as part of the proposed project will be carried out as described in this EIR (EIR).

The following table lists each of the mitigation measures specified in this EIR and identifies the party or parties responsible for implementation and monitoring of each measure.

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
4.1 Air Quality			
No mitigation measures were identified for air quality.			
4.2 Biological Resources			
MM BIO-1: Biological Monitoring For Special-Status Species. During impact hammer pile driving project activities, the project applicant shall retain a qualified biologist to monitor project activities in accordance with the mitigation measures below. The Biological Monitor shall be authorized to temporarily halt or redirect work. The Biological Monitor shall keep logs recording site activities, species observed and their behavior during construction activities, and, if needed, actions taken to avoid impacts to species. These logs shall be maintained by BAE Systems. In the event that the Biological Monitor suspects that work being conducted would have significant adverse effects to special status species (e.g. marine mammals or turtles), he/she shall immediately notify the contractor and BAE Systems and impose corrective measures. If the situation is not remedied immediately, the monitor shall notify the permitting agencies.	BAE Systems	Prior to and during pile driving activities.	The project applicant shall retain a qualified biological monitor for any active impact hammer pile driving associated with the proposed project. The project applicant shall submit a letter of verification to the Port District identifying the Biological Monitor(s) involved in the Biological Monitoring Program. BAE Systems shall include this verification letter in the completion report (Mitigation Measure BIO-8). Pile driving is anticipated to be scheduled to occur outside of the least tern nesting season. The anticipated schedule is approximately November 2012 for several test piles, March 2013 for the piles closest to shore, and Fall (October–November) 2013 for the remaining piles.
MM BIO-2: Biological Monitoring of Impact Hammer Pile Driving. During construction, the project applicant shall retain a qualified Biological Monitor to conduct monitoring within 500 feet of any active impact hammer pile driving. The contractor shall not start work if any observations of turtles or marine mammals are made prior to starting impact hammer pile driving. The applicant shall ensure that work will not re-commence until the turtle(s) or marine mammal(s) have left the area, or ten minutes have passed.	BAE Systems	During impact hammer pile driving.	The project applicant shall retain a qualified biological monitor for any active impact hammer pile driving associated with the proposed project. The project applicant shall submit a letter of verification to the Port District identifying the Biological Monitor(s) involved in the Biological Monitoring Program. BAE Systems shall include this verification letter in the completion report (Mitigation Measure BIO-8). Pile driving is anticipated to be scheduled to occur outside of the least tern nesting season. The anticipated schedule is approximately November 2012 for several test piles, March 2013 for the piles closest

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
			to shore, and Fall (October–November) 2013 for the remaining piles.
MM BIO-3: Pile Driving. When performing impact pile driving, the contractor shall commence work with one blow followed by a 1-minute period of no pile driving, prior to commencing full pile driving activities. The purpose of this activity is to encourage turtles and marine mammals in the area to leave the project site prior to commencement of work. A qualified Biological Monitor shall commence monitoring prior to initial pile driving as described above to determine if turtles or marine mammals are in the area. This process shall be repeated if pile driving ceases for a period of greater than an hour.	BAE Systems	Prior to and during pile driving activities.	Project Applicant shall retain a qualified biological monitor for active impact hammer pile driving. BAE Systems shall submit a letter of verification to the Port District identifying the Biological Monitor(s) involved in the Biological Monitoring Program. BAE Systems shall include this verification letter in the completion report (Mitigation Measure BIO-8). Pile driving is anticipated to be scheduled to occur outside of the least tern nesting season. The anticipated schedule is approximately November 2012 for several test piles, March 2013 for the piles closest to shore, and Fall (October–November) 2013 for the remaining piles.
MM BIO-4: Vessel Speed. The project applicant will ensure that construction vessel traffic shall adhere to the existing no wake zone requirements for the shipyard and not exceed a maximum speed of 5 knots (5.75 miles per hour) within 500 feet of any BAE Systems seawall, pier, or mooring dolphin.	BAE Systems	During all in-water construction and dredging activities.	Periodic monitoring by BAE Systems and contractor staff. BAE Systems to retain copy of construction documents with the contract specifications that require construction vessel traffic to adhere to the existing no wake zone requirements for the shipyard and not exceed the identified maximum speed of 5 knots.
MM BIO-5: Turbidity Curtain. Regardless of the timing of dredging for dredging areas A-2, B-1, B-2, and C, the project applicant shall deploy a silt curtain around the dredging areas to restrict the surface visible turbidity plume to the area of construction and dredging. It shall consist of a hanging weighted curtain with a surface float line and shall extend from the surface to 20 feet down into the water column. The turbidity curtain shall be kept a minimum of 30 feet away from staked eelgrass beds in order to prevent damage to eelgrass beds from curtain drag or movement. The goal of this measure is to minimize the area of the Bay in which visibility of prey by terns is obstructed.	BAE Systems	Turbidity curtain required for dredging during California least tern nesting season (April 1 to September 15) and for dredging of sediments not suitable for ocean disposal.	The project applicant will report to BAE Systems that turbidity curtains are in place during dredging destined for upland disposal. BAE Systems to provide copies of construction documents with verification that turbidity curtains are in place as part of the completion report (Mitigation Measure BIO-8). Dredging is anticipated to be scheduled to occur outside of the California least tern nesting season. The anticipated schedule is approximately February to March 2013 for the area closest to the shore, and Fall (late September through December) 2013 for the remaining areas.

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
The applicant shall ensure that this measure is implemented for the duration of dredge activity.			
MM BIO-6: Biological Monitoring During Breeding Season. Should impact hammer pile driving activities be conducted during the breeding season, a qualified Biological Monitor shall be retained by the project applicant at its expense to conduct monitoring within 500 feet of construction activities and a silt curtain installed during breeding season. The monitor shall be empowered to delay commencing work, and shall do so if terns are actively foraging (e.g., searching and diving) within the work area. Should adverse impacts to terns occur (e.g., agitation or startling during foraging activities), the Biological Monitor shall be empowered to delay or halt construction, and shall do so until California least terns have left the project site.	BAE Systems	During hammer pile driving activities and during breeding season (April 1 to September 15).	The project applicant shall retain a qualified biological monitor for active impact hammer pile driving during the breeding season. BAE Systems shall submit a letter of verification to the Port District identifying the Biological Monitor(s) involved in the Biological Monitoring Program. BAE Systems shall include this verification letter in the completion report (Mitigation Measure BIO-8). Pile driving is anticipated to be scheduled to occur outside of the California least tern nesting season. The anticipated schedule is approximately November 2012 for several test piles, March 2013 for the piles closest to shore, and Fall (October–November) 2013 for the remaining piles.
MM BIO-7: Bay Coverage. Prior to construction activities that would trigger off-site mitigation, the project applicant shall identify a mitigation site in San Diego Bay to meet a 1:1 mitigation ratio for approximately 7,969 square feet of bay coverage impacts. Mitigation may comprise development of a fish enhancement structure in the form of a rock/rubble reef. However, other acceptable forms of mitigation include: • Removal of similar structures within the bay (e.g., dock removal); • Removal of upland fill from the bay; • Creation of eelgrass habitat and/or reef structures in presently unvegetated bottom areas; • Purchase of credits from a mitigation bank (for fill	BAE Systems	Prior to in-water construction activities that would trigger off-site mitigation. (Fall 2013 or later)	The project applicant will prepare and submit to the Port District and resource agencies a finalized mitigation plan for approval. BAE Systems shall include this finalized mitigation plan in the completion report (Mitigation Measure BIO-8)

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
removal or enhancement such as eelgrass); • Removal of non-functional riprap or debris from intertidal or shallow subtidal habitat in the bay to improve suitability for use by birds and fish; and • Shallow-up deep, subtidal habitat to shallow, subtidal habitat to create more preferred foraging habitat.			
MM BIO-8: Completion Report for Project Mitigation. Within 30 days of project completion, but prior to any authorized use of the replacement pier, BAE Systems Environmental Manager or designee shall submit to the Port District and all affected resource and permitting agencies, a Completion Report detailing the completion and compliance with all mitigation measures contained in the proposed project's Mitigation Monitoring and Reporting Program (MMRP), including Mitigation Measures BIO-1 through BIO-14. The Completion Report shall contain all logs and related documentation as required by each mitigation measure identified in the project's MMRP.	BAE Systems	Within 30 days of project completion and prior to use of replacement pier.	BAE Systems shall submit a Completion Report for project mitigation to Port District. Project completion is anticipated in approximately August 2014.
MM BIO-9: Eelgrass Boundaries. Prior to construction, the boundaries of the eelgrass beds, located along the north/west and east/west bulkheads within the BAE Systems facility, shall be staked with ridged PVC markers or self-centering buoys visible at all tide heights. The project applicant shall protect, replace, and maintain the markers/buoys as needed to ensure that they remain in place and properly stake the boundaries of the eelgrass beds.	BAE Systems	Staking to occur after completion of pre-construction survey described in Mitigation Measure BIO-11.	The project applicant to report to Port District that eelgrass beds remained staked during construction activities. Verification of maintenance of eelgrass boundaries shall be provided in the completion report prepared for the proposed project (Mitigation Measure BIO-8).
MM BIO-10: Eelgrass Silt Curtain. During shoreline work, the project applicant will protect eelgrass with silt curtains deployed above the eelgrass and below the shoreline work area. The silt	BAE Systems	Prior to and during shoreline construction activities.	The project applicant to report to the Port District that eelgrass silt curtains are deployed above the eelgrass and below the shoreline work area. Verification of silt curtain deployment shall be provided in the completion

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
curtain will be designed to prevent drift, so that impacts to eelgrass during installation are avoided.			report prepared for the proposed project (Mitigation Measure BIO-8). The anticipated schedule for in-water construction activity along the shoreline is approximately November 2012 through March 2013.
MM BIO-11: Eelgrass Surveys. The project applicant shall conduct a pre-construction eelgrass survey in accordance with the requirements of the Southern California Eelgrass Mitigation Policy (SCEMP). A pre-construction eelgrass survey shall be completed by a qualified biologist within 60 days prior to initiation of demolition or construction activities at the site. This survey shall include both aerial and density characterization of the beds. A post-construction survey shall be performed by a qualified biologist within 30 days following project completion to quantify any unanticipated losses to eelgrass habitat. Impacts shall then be determined from a comparison of pre- and post-construction survey results. Impacts to eelgrass, if any, would be mitigated through conformance with the SCEMP, which defines the mitigation ratio and other requirements to achieve mitigation for significant eelgrass impacts. If required following the post-construction survey, the SCEMP defined mitigation shall be developed, approved by the U.S. Army Corps of Engineers (USACE) and National Marine Fisheries Service (NMFS), and implemented to offset losses to eelgrass.	BAE Systems	Prior to in-water construction activities; within 30 days of project completion.	The project applicant shall retain a qualified biologist to conduct pre- and post-construction eelgrass surveys within immediate vicinity of project per SCEMP to quantify the amount of existing eelgrass. BAE Systems to include a copy of survey in the completion report (Mitigation Measure BIO-8).
MM BIO-12: *Caulerpa*. BAE Systems shall conduct a surveillance-level survey for *Caulerpa taxifolia* not more than 90 days before the initiation of construction to determine presence/absence of this species within the immediate vicinity of the project. If *Caulerpa taxifolia* is identified during a survey, or at any other time before, during, or within 120 days	BAE Systems	Prior to in-water construction activities.	The project applicant shall retain a qualified biologist to conduct pre-construction Caulerpa surveys within immediate vicinity of project to report that no Caulerpa are present. In the event that Caulerpa are identified, the project applicant shall notify the Port District and resource agencies that activities in the affected area have ceased, and the area that contains Caulerpa is

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
following completion of authorized activities, both NMFS and CDFG shall be contacted within 24 hours of first noting the occurrence. In the event *Caulerpa* is detected, all disturbing activity shall cease until such time as the infestation has been isolated and treated, or the risk of spread from the disturbing activity is eliminated in accordance with the CCP.			isolated and treated. BAE Systems to include a copy of survey in the completion report (Mitigation Measure BIO-8).
BIO-13 Marine Mammal and Turtle Contingency Plan. Prior to the initiation of impact hammer pile driving activities, the project applicant shall retain a qualified biologist to prepare a Marine Mammal and Turtle Contingency Plan (Contingency Plan) to identify the actions taken in the event that, in spite of the requirement to stop work if a marine mammal or sea turtle is present in the vicinity of the construction activity, a marine mammal or sea turtle is injured. The Contingency Plan shall be submitted to the Port and National Marine Fisheries Service (NMFS) or other appropriate resource agency for review and approval and shall include but not be limited to notification "trees," identification of rescue centers, information for key contacts, and plans of action. The applicant shall ensure that this measure is implemented for the duration of impact hammer pile driving activity.	BAE Systems	Prior to the initiation of impact hammer pile driving activities and the duration of impact hammer pile driving activity.	The project applicant shall retain a qualified biologist to prepare a Marine Mammal and Turtle Contingency Plan (Contingency Plan) to be implemented during the duration of impact hammer pile driving activity.
BIO-14 Cleanup Abatement Order MMRP Compliance. The project applicant shall ensure that construction activities within the scope of Shipyard Sediment Site Cleanup Abatement Order (R-9-2012-0024) comply with all relevant Mitigation Monitoring and Reporting Program components of the Regional Water Quality Control Board's EIR.	BAE Systems	Prior to and/or during construction as appropriate.	BAE Systems shall incorporate the applicable measures recommended in the Shipyard Sediment Site Clean Abatement Order (R-9-2012-0024) Mitigation Monitoring and Reporting Program components.

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
4.3 Geology and Soils			
MM GEO-1: Geotechnical Report Recommendations. The project applicant shall comply with the specifications and provisions of the geotechnical investigation prepared for the Pier 4 Replacement project (Terracosta Consulting Group, 2011) for the development of the new pier, new bulkhead sections, a new mooring dolphin, and related utilities. The recommendations of the study shall be implemented during final design and construction of the project.	BAE Systems	Prior to and/or during construction as appropriate (prior to approval of proposed construction plans and on-going during construction). Implemented prior to construction if necessary.	BAE Systems shall incorporate the measures recommended in the 2011 Geotechnical Investigation, related to excavation, earthwork, foundations, and earth-retaining structures into the final design plans for the proposed project. The project applicant shall ensure compliance with final design plans during construction.
MM GEO-2: Completion Report for Project Mitigation. Within 30 days of project completion, but prior to any authorized use of the replacement pier, BAE Systems Environmental Manager or designee shall submit to the Port District and all affected resource and permitting agencies, a Completion Report detailing the completion and compliance with all mitigation measures contained in the proposed project's Mitigation Monitoring and Reporting Program (MMRP), including Mitigation Measure GEO-2. The Completion Report shall contain all logs and related documentation as required by each mitigation measure identified in the project's MMRP.	BAE Systems	Within 30 days of project completion and prior to use of replacement pier.	BAE Systems to submit a Completion Report for project mitigation to Port District by BAE Systems. Project completion is anticipated in approximately August 2014.
4.4 Climate Change and Greenhouse Gases			
No mitigation measures were identified for climate change or greenhouse gases.			

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
4.5 Hazards and Hazardous Materials			
MM HAZ-1: Secondary Containment. Prior to the commencement of dredging, demolition or construction activity, the project applicant shall install a secondary containment structure for the storage of all fuel, oil and other petroleum products, as required by the District Urban Stormwater Mitigation Plan. At all times during construction and operation of the project, the project applicant shall house all oil and fuel in a secondary containment structure to ensure that spilled or leaked oil or fuel will be prevented from entering the water column.	BAE Systems	Prior to and during construction.	The project applicant to conduct periodic monitoring of secondary containment and to report to the Port District that spills or leaks (if any) were contained. BAE Systems to retain copy of construction documents with the requirements for secondary containment structures. BAE Systems to include these construction documents in the Completion Report prepared for the proposed project (Mitigation Measure HAZ-10).
MM HAZ-2: Dredging Management Plan. Prior to dredging operations, BAE Systems shall prepare a Dredging Management Plan (DMP) for review and approval by the Army Corps of Engineers (USACE). The project applicant shall implement the measures listed in the DMP during dredging operations. The DMP shall contain standard operating procedures for the project to assist the dredge contractor in preventing accidental spills and providing the necessary guidelines to follow in case of an oil or fuel spill. Typical BMPs for equipment failure or repair shall be identified in the DMP and shall include, but not be limited to: • Communication to project personnel; • Proper signage and/or barriers alerting others of potentially unsafe conditions; • All construction repair work to be conducted on land and not over water; • Repair work involving use of liquids to be performed with proper spill containment equipment (e.g., spill kit); and	BAE Systems	Prior to and during dredging operations.	The project applicant will conduct periodic monitoring of dredging operations. The project applicant will prepare and submit a Dredging Management Plan (DMP) to the USACE for review and approval. BAE Systems to retain copy of construction documents with the requirements identified in the DMP. BAE Systems to include these construction documents in the Completion Report prepared for the proposed project (Mitigation Measure HAZ-10). The anticipated schedule for dredging is approximately February to March 2013 for the area closest to the shore, and Fall (late September through December) 2013 for the remaining areas.

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
• A contingency plan identifying availability of other equipment or subcontracting options. In addition, the DMP shall include, at a minimum, the following measures to prevent accidental oil/fuel spills during construction activities: • Personnel involved with dredging and handling the dredged material shall be given training on their specific task areas, which will be identified in the Health and Safety Plan (H&S Plan). The training shall be carried out by BAE Systems per OSHA requirements. The training materials include but shall not be limited to the following: o Potential hazards resulting from accidental oil and/or fuel spills; and o Proper dredging equipment operation. • As an operational control element, all oil and fuel shall be housed in a secondary containment structure to ensure that any spill or leakage is prevented from entering the water column. • Required instrumentation to avoid spillage of dredging material shall be identified for each piece of equipment used during dredging operations. • All equipment shall be inspected by dredge contractor personnel before starting the shift. These inspections are intended to identify typical wear or faulty parts that may contain oil or fuel. • Personnel shall be required to visually monitor for oil or fuel spills during construction activities. • In the event that a sheen or spill is observed,			

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
the equipment shall be immediately shut down and the source of the spill identified and contained. Additionally, the spill shall be reported to the applicable agencies presented in the DMP. • All personnel associated with dredging activities will be trained as to where oil/fuel spill kits are located, how to deploy the oil-absorbent pads, and proper disposal guidelines. The dredging barge shall have sufficient quantity of oil/fuel spill kits on board to allow for quick and timely implementation of spill containment. • Barge load limits and loading procedures will be identified, and the appropriate draft level will be marked on the materials barge hull. • Water discharge (decant water from sediment dredged in areas designated for upland disposal and storm water) to the San Diego Bay is prohibited.			
MM HAZ-3: Contingency Plan. The project applicant shall prepare and submit to the USACE for approval a Contingency Plan prior to the initiation of dredging and implemented for the duration of the dredging activity, to address equipment and operational failures that could occur during dredging operations. The Contingency Plan shall include, but shall not be limited to the following measures to prevent a release of hazardous materials in the event of equipment failure, repair, or silt curtain breach: • Procedures for communication to project personnel; • Installation of proper signage and/or barriers	BAE Systems	Prior to and during dredging activities.	The project applicant shall prepare and implement a Contingency Plan. BAE Systems to submit the Contingency Plan to USACE for review and approval. BAE Systems to retain copy of construction documents with the requirements identified in the Contingency Plan. BAE Systems shall include these construction documents in the Completion Report prepared for the proposed project (Mitigation Measure HAZ-10). The anticipated schedule for dredging is approximately February to March 2013 for the area closest to the shore, and Fall (late September through December) 2013 for the remaining areas.

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
alerting others of potentially unsafe conditions; • Specification for repair work to be conducted on land and not over water; • Identification of proper spill containment equipment (e.g., spill kit); • Identification of other equipment or subcontracting options; • Emergency procedures to follow in the event of equipment failure or release; • Incident reporting and review procedure to evaluate the causes of an accidental release and steps to avoid further incidents; • Response procedures in the event of barge overfill; and • Procedures for prompt notification of the District and all other regulatory agencies.			
MM HAZ-4: Health and Safety Plan. The project applicant shall prepare and submit to the USACE for approval a Health and Safety Plan prior to the initiation of dredging and implemented for the duration of the dredging activity. The H&S Plan will be prepared in general accordance with Federal Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response Standard (29 Code of Federal Regulations [CFR] 1910.120) and Title 8 California Code of Regulations (CCR) Section 5192. The H&S Plan will be reviewed and approved by a Certified Industrial Hygienist and at the project applicant's expense. The H&S Plan will include the following requirements at a minimum: • Training for operators to prevent and respond to	BAE Systems	Prior to and during dredging activities.	The project applicant shall prepare and implement a Health and Safety Plan. BAE Systems shall submit the Health and Safety Plan to the USACE for review and approval. BAE Systems to retain copy of construction documents with the requirements identified in the Health and Safety Plan. BAE Systems shall include these construction documents in the Completion Report prepared for the proposed project (Mitigation Measure HAZ-10). The anticipated schedule for dredging is approximately February to March 2013 for the area closest to the shore, and Fall (late September through December) 2013 for the remaining areas.

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
releases; • Identification of appropriate Personal Protection Equipment for all construction activities, including personal floatation devices, hard hats, and work shoes/clothing; • Training in the safe operation of cranes, barges, tugs, and support craft; • Site evacuation and emergency first aid response; and • Documentation that requires that health and safety procedures have been implemented.			
MM HAZ-5: Communication Plan. Prior to the initiation of dredging activities, the project applicant shall prepare and submit to the USACE a Communication Plan and operational guidelines for communications between the U.S. Coast Guard and all vessel operators to ensure the safe movement of project vessels from the dredge to the unloading area. Features of the Communication Plan will include at a minimum: • Identification of vessel speed limitations (e.g., wake/no wake); • Notification to project personnel using air horns as necessary; and • Staging the dredge activity to control the amount of material being handled, dewatered, and transported to reduce the potential for accidents or incidents related vessel operation.	BAE Systems	Prior to and during dredging activities.	The project applicant shall prepare and implement a Communication Plan. BAE Systems shall submit the Communications Plan to the USACE for review. BAE Systems to retain copy of construction documents with the requirements identified in the Communication Plan. BAE Systems shall include these construction documents in the Completion Report prepared for the proposed project (Mitigation Measure HAZ-10). The anticipated schedule for dredging is approximately February to March 2013 for the area closest to the shore, and Fall (late September through December) 2013 for the remaining areas.
MM HAZ-6: Upland Dredging Operation Practices. During dredging operations, BAE Systems shall ensure that the dredge contractor is implementing standard BMPs for minimizing resuspension and spillage through contractor	BAE Systems	Prior to and during dredging activities.	The project applicant to conduct periodic monitoring during dredging activities. BAE Systems to retain copy of construction documents with the requirements for the identified dredging practices. BAE Systems shall include these construction documents in the

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
contract specifications. Such BMPs shall include, but not be limited to, the following: • The contractor shall remove dredge material and not stockpile material on the bottom of the San Diego Bay floor, and shall not sweep or level the bottom surface with the bucket. • The contractor shall not overfill the digging bucket because overfill results in material overflowing back into the water. • The contractor shall deploy inner- and outer-boundary floating silt/turbidity curtains for the dredge areas subject to upland disposal. These two curtains (also referred to as "double" silt/turbidity curtains) will be located around the dredge activity area at all times and around the immediate dredge barge/bucket area. These double silt/turbidity curtains shall be utilized for containment of the dredge area, while configurations, technologies, and actual locations of silt curtains in relation to the dredge barge shall be finalized during the design phase of the project. • Contractors shall control the swing radius of the unloading equipment within the silt curtain and to reduce the amount of sediment spillage in the dredge area. • The contractor shall not overfill the material barge to a point where overflow or spillage could occur. Each material barge shall be marked in such a way to allow the operator to visually identify the maximum load point. The marking should allow sufficient interior freeboard to prevent spillage in rough water such as ship wakes during transit. Initiating the			Completion Report prepared for the proposed project (Mitigation Measure HAZ-10). The anticipated schedule for dredging is approximately February to March 2013 for the area closest to the shore, and Fall (late September through December) 2013 for the remaining areas.

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
material barge marking shall minimize impact of load spillage during transit to the ocean disposal site. • The contractor shall not use weirs as a means to dewater the scow and shall allow additional room for sediment placement. Preventing this action shall minimize the introduction of turbidity to the water column. • The contractor shall place material in the material barge such that splashing or sloshing does not occur, which could send sediment back into the water. Splashing can be controlled by restricting the drop height from the bucket. • If the use of a grate to collect debris is required, the contractor shall not allow material to pile up on the grate and flow or slip from the grate back into the water. The debris scalper shall be positioned in such a way as to be totally contained on the shore side of the unloading operations. The dredge operator shall visually monitor for debris build-up and alert the support personnel on the barge to assist in clearing the debris, as necessary. Debris that is derived from dredging activities shall be removed from the grate by the environmental clamshell bucket and placed in a contained area on the dredge barge or in a second material barge for subsequent removal and disposal. • The contractor shall restrict barge movement and work boat speeds (i.e., reducing propeller wash) in the dredge area. • For dredged sediment subject to upland disposal, the contractor shall reduce hardscape spillage that could occur during the transfer			

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
from excavator arm onto transport vehicles by sloping the hardscape near the spill plate into a collection sump or alternative means (e.g., pier containment) to allow water and fluidized mud that may fall to be collected. • For dredged sediment subject to upland disposal, the contractor shall use a power wash unit to reduce impacts related to spillage from the excavator arm onto transport vehicles. In the event that sediment is spilled onto the transport vehicle, it can be quickly washed into the collection sump. • Additional requirements as referenced in Mitigation Measure BIO-14 shall be applied to upland dredging activities as applicable.			
MM HAZ-7: Binding Agents. During the construction phase of the proposed project, the project applicant shall specify through construction contract specifications, that pozzolonic agents, if used for dredge sediment destined for upland disposal, shall be applied through a wet application blending process. This method of blending shall utilize the procedures identified for the BAE Systems' Dry Dock Sump Maintenance Dredging Project or another project subject to review and approval by the District.	BAE Systems	Prior to and during dredging activities.	The project applicant to conduct periodic monitoring. BAE Systems to retain copy of construction documents with the contract specifications that pozzolonic agents shall be applied through a wet application blending process. BAE Systems shall include these construction documents in the Completion Report prepared for the proposed project (Mitigation Measure HAZ-10). The anticipated schedule for dredging is approximately February to March 2013 for the area closest to the shore, and Fall (late September through December) 2013 for the remaining areas.
MM HAZ-8: Dewatering. At all times during construction of the proposed project, the project applicant shall ensure that the decant from dredged sediments subject to upland disposal and storm water containers are sealed when not in use to avoid overflowing during a storm event. This would involve the decant and/or storm water being collected in a sump in the operation area, pumped	BAE Systems	Prior to and during dredging activities.	BAE Systems to retain copy of construction documents, with the requirements for stormwater containment. BAE Systems shall include these construction documents in the Completion Report prepared for the proposed project (Mitigation Measure HAZ-10). The anticipated schedule for dredging is approximately February to March 2013 for the area closest to the shore, and Fall (late September through December)

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
to aboveground tanks, and disposed of either within the sanitary sewer or off site. The storage areas shall be surrounded by a curb, dike, berm, or some other type of secondary containment system. All paved storage areas shall be free of cracks and gaps, and shall be able to contain leaks and overflows until they can be addressed.			2013 for the remaining areas.
MM HAZ-9: Haul Trucks. Prior to dredging activities, the project applicant shall require the contractor to accept the following construction contraction specifications: • Truck loads are limited to ensure sufficient freeboard to prevent spillage during transport. • Haul trucks leaving the project site shall be covered and secured per Caltrans regulations during transport to the disposal facility. • Trucks hauling dredged sediment shall be loaded within a constructed loading zone to confine sediment spilled during the loading process. • Prior to entering the roadway, the vehicles will be power washed to prevent cross-contamination onto the roadways.	BAE Systems	Prior to and during dredging activities.	The project applicant to conduct periodic monitoring. BAE Systems to retain copy of construction documents with the requirements for the identified haul truck practices. BAE Systems shall include these construction documents in the Completion Report prepared for the proposed project (Mitigation Measure HAZ-10).
MM HAZ-10: Completion Report for Project Mitigation. Within 30 days of project completion, but prior to any authorized use of the replacement pier, BAE Systems Environmental Manager or designee shall submit to the Port District and all affected resource and permitting agencies, a Completion Report detailing the completion and compliance with all mitigation measures contained in the proposed project's Mitigation Monitoring and Reporting Program (MMRP), including Mitigation Measures HAZ-1 through HAZ-10. The Completion	BAE Systems	Within 30 days of project completion and prior to active use of replacement pier.	BAE Systems shall submit a Completion Report for project mitigation to Port District. Project completion is anticipated in approximately August 2014.

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
Report shall contain all logs and related documentation as required by each mitigation measure identified in the project's MMRP.			
4.6 Hydrology and Water Quality			
MM HYD-1: Pre-construction Meeting. BAE Systems Environmental Manager or designee will ensure that the contractor shall hold a pre-construction meeting to review all construction mitigation requirements with the construction crew. The purpose of the meeting will be to review the relevant project features, regulatory requirements and mitigation measures to ensure implementation, and to review mitigation monitoring tracking program and log requirements. Invitations and notifications of the pre-construction meeting shall be made to Port District Environmental and Land Use Management staff, as well as affected resource and permitting agency staff.	BAE Systems	Prior to construction activities.	BAE Systems shall arrange a Pre-construction Meeting with the construction crew, the project biologist, and the Port District.
MM HYD-2: Completion Report for Project Mitigation. Within 30 days of project completion, but prior to any authorized use of the replacement pier, BAE Systems Environmental Manager or designee shall submit to the Port District and all affected resource and permitting agencies, a Completion Report detailing the completion and compliance with all mitigation measures contained in the proposed project's Mitigation Monitoring and Reporting Program (MMRP), including Mitigation Measure HYD-1. The Completion Report shall contain all logs and related documentation as required by each mitigation measure identified in the project's MMRP.	BAE Systems	Within 30 days of project completion and prior to use of replacement pier.	BAE Systems shall submit a Completion Report for Project Mitigation to Port District. Project completion is anticipated in approximately August 2014.

Proposed Mitigation	Responsible Party	Mitigation Timing	Monitoring and Report Procedure
4.7 Land Use and Planning			
No mitigation measures were identified for land use or planning impacts.			
4.8 Noise			
No mitigation measures were identified for noise impacts.			
4.9 Transportation and Traffic			
No mitigation measures were identified for transportation or traffic impacts.			
4.10 Utilities and Service Systems			
No mitigation measures were identified for utilities and service systems.			