

Mr. Vicente Rodriguez  
San Diego Regional Water Quality Control Board  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

**Re: Shipyard Sediment Remediation Project Draft Environmental Impact Report**

Dear: Mr. Rodriguez

On behalf of the San Diego Unified Port District (District), thank you for the opportunity to review the Draft EIR for the Shipyard Sediment Remediation Project. The District has identified some areas within the Draft EIR that could be clarified in order to improve the documents thoroughness, clarity and compliance with the California Environmental Quality Act (CEQA). Our review includes comments regarding the content of the Draft EIR, in the following categories:

- 1) Dewatering Sites;
- 2) Inconsistencies between the Draft EIR and Project's Cost Analysis Assumptions;
- 3) Sediment Sampling and Disposal;
- 4) Air Quality and Greenhouse Gas Emission Analysis; and
- 5) Mitigation Measures for the Convair Lagoon Alternative.

The District's comments and suggested revisions to the Draft EIR provided below are organized by these five categories.

**DEWATERING SITES**

The following comments are provided for the sediment staging areas identified in the Draft EIR for dewatering operations. The comments are organized by chapter, section and page number.

**Chapter 3, Project Description**

**A. Page 3-1, Section 3.2, Project Location**

**EIR:** *“The removal of the marine sediments will require upland areas for dewatering, solidification, and stockpiling of the materials and potential treatment of decanted waters prior to off-site disposal. Therefore, in addition to the open waters of the Shipyard Sediment Site, five upland areas have been identified by the San Diego Water Board as potential sediment staging areas.”*

**Comment:** These five potential sediment staging areas appear to be disconnected parcels that are under the control of various District tenants or other entities. The availability and suitability of these parcels should be analyzed in greater detail. The Draft EIR should include a survey of the parcels accessibility, pavement durability and the water containment collection and removal systems that would be needed to ensure no releases occur from dewatering activities.

**Comment:** The Draft EIR should analyze less space intensive sediment dewatering systems, such as centrifuges and/or reagent dehydration of sediments, which could be used on barges and would allow for sediment to be directly off-loaded from barges to trucks for disposal.

**Comment:** Staging Area 1 encompasses a significant portion of a 96-acre site that is occupied by Tenth Avenue Marine Terminal (TAMT). The Draft EIR has identified 36.14 acres in the south west section of the site as a “usable area”. The report also identifies a 13.52 acre “usable area” site in the northeast portion of Staging Area 1 which is predominately occupied by Burlington Northern Santa Fe Railroad’s (BNSF) major San Diego switching yard. The 36.14 acre “usable area” is partially comprised of the 20.5 acre Dole Fresh Fruit Company leasehold that is used as a container yard for weekly importation of bananas and other fresh fruit from Central America. The remaining 15.64 acres consists of the following; a portion of the San Diego Refrigerated Storage leasehold that is used for employee parking, container inspections by US Customs and Border Protection and for staging palletized break-bulk fruit cargos; a portion of the Cemex Pacific Coast Cement Corporation leasehold that is used for the importation of bulk cement; the wharf apron docks at Berth’s 10-1 through 10-6 where a variety of cargos are handled when loading or unloading cargo vessels; and the remainder consisting of paved open areas that contain storage areas for cargo, space for cargo handling equipment, truck staging lanes, rail tracks and roadways.

Use of all or any portion of these areas for the treatment of dredged sediments would have the following impacts at TAMT: (1) An average of 100 vessels per year dock at TAMT. The cargos consist mainly of 40-foot-long refrigerated containers or project cargos such as large wind mill components or large electrical transformers. Dole uses its entire facility to stage over 500 containers each week prior to delivery to West Coast markets or before being loaded back on board a vessel. Typical wind mill blades range in length from 130 feet to 160 feet and the tower sections can be up to 80 feet in length. These types of cargos normally cannot be stacked and tens of thousands of square feet of open space are needed to both store and handle them properly. (2) The terminal’s system of roadways and rail track need to be kept clear to effectively move cargo, material and equipment on and off the facility. Any prolonged closure of any portion of the terminal’s transportation system would have a significant impact on the efficiency of the entire terminal. (3) Within the area deemed as “useable” there are three tenant leaseholds. These leases would have to be re-negotiated, if the tenants are willing, to allow for this activity to occur. (4) The Port of San Diego is designated as a “Strategic Port” by the Federal Maritime Administration to handle military cargos. Under the San Diego “Port Planning Order” the Port is required to provide “staging space of no less than 8 acres” at TAMT within 48 hours after receiving notification from the US Military’s “Surface Deployment and Distribution Command” (SDDC). Any materials or equipment within the 8-acre footprint would need to be relocated on or off the terminal within the stipulated time frame. Since 2008, two to four military operations have taken place each year at TAMT. (5) Any reduction in space at the Terminal will result in lost revenue due to a reduction in cargo volumes, increased costs due to ineffective handling of cargo and impact the ability of the Port to effectively market its maritime cargo handling facilities. (6) If any of the existing activities described above were required to be relocated to accommodate use of the TAMT as Staging Area 1, such relocation may result in significant environmental impacts at the relocation site, which would need to be evaluated in the Draft EIR. As a result of these constraints, the use of a significant portion of the TAMT as Staging Area 1 to conduct the dewatering operations is likely to be infeasible.

**Comment:** Staging Area 2 also contains portions of the 96-acre TAMT site as well as a portion of the BNSF switching yard. “Useable Areas” within Staging Area 2 are further defined as: 0.57 acres within the Searles Valley leasehold (bulk cargo handler); 0.79 acres within the Stella Maris Seaman’s Center leasehold as well as the approaches to the TAMT truck scale; 2.77 acres containing a truck staging lot that is used as an overflow lot by Dole and whenever military operations are taking place. This area also contains a one acre site which is slated for development to begin during the 2<sup>nd</sup> quarter of 2012 in which an office complex for the Maritime Operations Department and potentially an office and warehouse

complex for the National Oceanic and Atmospheric Administration will be built. The remaining 2.59 acres contains both Port and BNSF property consisting of the lead rail tracks that serve TAMT as well as equipment storage areas for both entities.

Use of these areas for onshore dewatering and treatment will have similar impacts as described above including leasehold issues, potential loss of the staging area if a “Port Planning Order” is invoked, disruption of both cargo handling operations, disruption of transportation infrastructure and development plans resulting in loss of revenue. As a result of these constraints, the use of a significant portion of the TAMT as Staging Area 2 to conduct the dewatering operations is likely to be infeasible.

**Comment:** Staging Area 5 shows a “Useable Area” of 145.31 acres that consists of the 125 acre National City Marine Terminal (NCMT) with the remainder of the acreage split between BNSF property and the Dixieline Lumber leasehold on Port property. Pasha is the principal terminal operator at NCMT where it conducts operations consisting of the import, export, handling and storage of motor vehicles and a biweekly cargo service to and from Hawaii by Pasha’s Hawaii Transport Lines (PHTL). During each of the last three years Pasha has received an average of approximately 243,000 vehicles on 165 vessels. PHTL annually ships and receives in excess of 100,000 tons of cargo consisting of a variety of high and wide cargos (cement trucks, fire trucks, sewer pipe, Ferris wheels, yachts, containers, recreational trailers, crates etc.) on 30 vessels in the Hawaiian trade. Dixieline Lumber and Weyerhaeuser Lumber, another lumber company which is not within the “useable area”, receive approximately 96 million board feet of lumber each year on 12 lumber barges. All of these cargos require large open paved areas for storage plus roadways and rail tracks for handling and transport. Each month up to 26,000 vehicles can be stored on the terminal.

The “Port Planning Order” applies to NCMT as well. If notification is made by SDDC 15 acres of staging space must be made available within 48 hours. Again, the use of NCMT for onshore dewatering and treatment will have significant lease issues, disruption of revenue producing cargo operations, have a negative effect upon marketing of the terminal and could interfere with national security if a PPO is initiated. As a result of these constraints, the use of the NCMT as Staging Area 5 to conduct the dewatering operations is likely to be infeasible.

#### **B. Pages 3-16 through 3-26, Figures**

**Comment:** Figures 3-3 through 3-7, which identify the location of proposed staging areas, appear to be out of date. For example, the CP Kelko waterside leasehold does not reflect the recent demolition of waterside structures and the related increase in open space. This information should be updated in the Final EIR.

### **INCONSISTENCIES BETWEEN THE DRAFT EIR PROJECT DESCRIPTION AND THE PROJECT’S COST ANALYSIS ASSUMPTIONS**

The *Revised Tentative Cleanup and Abatement Order and Draft Technical Report* identifies a cost estimate for the Shipyard Sediment Remediation Project within Appendix 4, Section 32, Table A32-26. The District has identified some inconsistencies between the cost estimate project assumptions and the Shipyard Sediment Remediation Project Description provided in Chapter 3, Project Description, of the Draft EIR.

In general, the District has identified inconsistencies that pertain to (1) the Construction Schedule, (2) Demolition and Capping Activities, (3) Landfill Disposal, (4) Dredge Quantity, and (5) Quarry Run Rock. Table 1, provided at the end of this comment letter, identifies each cost assumption, inconsistency in the Draft EIR, and applicable environmental issue. Below is a summary of the inconsistencies that have been

identified between the cost estimate project description/assumptions and the Draft EIR project description, and their potential repercussions on the analysis contained in the Draft EIR.

- 1. Construction Schedule.** In the cost estimate, the construction scenario for the proposed project is described as ‘3 Construction Seasons,’ without further definition. In the Draft EIR, the construction scenario is described as follows: *“There are two scheduling options for completion of the remedial action. The first scheduling option is expected to take 2 to 2.5 years to complete. Under this option, the dredging operations would occur for 7 months of the year and would cease from April through August during the endangered California least tern breeding season. The second option is to implement the remedial plan with continuous dredging operations, which would be expected to take approximately 12.5 months to complete. This scenario assumes that the dewatering, solidification, and stockpiling of the materials would occur simultaneously and continuously with the dredging. Also assumed under this compressed schedule option is that dredging operations could proceed year-round, including during the breeding season of the endangered California least tern (April through August).”*

The construction scenarios described in the cost estimate and the Draft EIR are not consistent. The cost estimate identifies three construction seasons, while the Draft EIR identifies 12.5 months or 2.5 years to complete construction. Assuming one construction season equates to one year of construction, the cost estimate anticipates a longer duration of construction. If this extended period of construction is accurate, the Air Quality analysis within the Draft EIR may need to be revised to evaluate the extended construction timeline. An extended construction timeline could reduce air quality emission impacts, if the amount and type of daily construction is reduced from what is currently accounted for within the Draft EIR.

- 2. Demolition and Capping Activities.** The cost estimate identifies the demolition of an existing BAE pier, while the Draft EIR does not mention demolition of this pier. If demolition of the BAE pier is considered a component of the proposed project, the Project Description, and Air Quality and Transportation and Circulation analysis in the Draft EIR would need to be revised to reflect this demolition work. Demolition of the BAE pier would likely require off-site disposal, which would result in increased truck trips and associated air emissions. Additional construction equipment may also be required for this demolition, or equipment already identified in the Draft EIR may be used for longer periods of time, which would result in increased construction-related emissions. An increase in truck traffic and construction-related emissions from demolition of the BAE pier thus may result in greater impacts to Air Quality and Transportation and Circulation than accounted for in the Draft EIR.

The cost estimate also assumes that half of the total dredged area will receive 1-3 feet of clean sand for a cap. The Draft EIR assumes that only the pier and pilings will receive a clean sand cap. If half of the dredged area is to receive a sand cap, the Draft EIR should to be revised to reflect the additional placement and importation of sand within the Project Description, Transportation and Circulation and Air Quality EIR sections. In the Transportation and Circulation analysis, the importation of additional sand would increase truck trips and associated air emissions above levels currently accounted for in the Draft EIR. Additional construction equipment may also be required for the placement of the sand cap, or equipment already identified may be used for longer periods of time, which also would increase construction-related emissions. An increase in truck traffic and construction equipment emissions would likely result in greater impacts to Air Quality and Transportation and Circulation than accounted for in the Draft EIR.

- 3. Landfill Disposal.** The cost estimate identifies the Copper Mountain landfill in Arizona as the disposal site for all sediment. The Draft EIR identifies the Kettleman Hills landfill, in Kings County,

California, as the disposal site for sediment classified as a hazardous material (up to 15 percent of the sediment) and the Otay Landfill in San Diego, California, as the disposal site for non-hazardous sediment (85 percent of the sediment). If dredged sediment is to be disposed of at the Copper Mountain landfill in Arizona, the Project Description, and Air Quality and Transportation and Circulation analysis in the Draft EIR should be revised. In the Transportation and Circulation analysis, the disposal location in Arizona would increase truck trip vehicle miles traveled. An increase in vehicle miles traveled by the disposal trucks would result in an associated increase in air emissions. If sediment is to be disposed of at the Copper Mountain landfill, the proposed project would likely result in greater impacts to Transportation and Circulation and Air Quality than accounted for in the Draft EIR.

Additionally, the cost estimate assumes a total quantity of 171,500 cubic yards (cy) of sediment will be disposed after handling and dewatering activities. The Draft EIR identifies a total quantity of 164,910 cy to be disposed after handling and dewatering activities. If 171,500 cy of sediment must be disposed of off-site, the Draft EIR should be revised to reflect this additional quantity within the Project Description, Air Quality and Transportation and Circulation sections. An increase in off-site disposal would require additional truck trips, resulting in increased air emissions, and would potentially result in greater impacts to Transportation and Circulation and Air Quality than analyzed in the Draft EIR.

- 4. Dredge Quantity.** In addition to an initial 143,400 cy of dredging, the cost estimate identifies 28,100 cy of “Additional Dredging.” Additional dredging is described “as needed for a second pass.” The cost estimate states that this additional dredging will consist of two feet of dredging over one-half of the remedial area. Including initial and secondary dredging, the cost estimate identifies a total of 171,500 cy of sediment that will be dredged. However, the Draft EIR identifies a total of 143,400 cy of sediment that will be dredged. The Draft EIR does not identify additional dredging as part of the proposed project and does not account for the additional 28,100 cy of dredge identified in the cost estimate. If a total of 171,500 cy of sediment will be dredged (as identified in the cost estimate), rather than 143,400 cy of sediment (as identified in the Draft EIR), the Draft EIR should be revised to reflect this additional dredging in the Project Description, Transportation and Circulation, and Air Quality sections. In the Transportation and Circulation analysis, the removal of sediment during additional dredging activities would increase truck trips (and associated air emissions) and would likely result in greater Transportation and Circulation impacts than accounted for in the Draft EIR. Additional construction equipment may also be required for the additional dredging, or equipment already identified may be used for longer periods of time, which would increase construction-related emissions and cause impacts to Air Quality to be greater than accounted for in the Draft EIR.
- 5. Quarry Run Rock.** The cost estimate identifies the placement of 21,877 tons of quarry run rock for the protection of marine structures. The Draft EIR does not account for the importation or placement of quarry run rock. If 21,877 tons of rock is required to be placed within the proposed project site, the Draft EIR should be revised to reflect this change in the Project Description, Air Quality, and Transportation and Circulation sections. The import of the quarry run rock would result in increased truck trips (and associated air emissions) and would result in potentially greater impacts to Transportation and Circulation than analyzed in the Draft EIR. Additional construction equipment may also be required for the placement of quarry run rock, or equipment already identified may be used for longer periods of time, which would further increase construction related emissions and cause impacts to Air Quality to be greater than accounted for in the Draft EIR.

## **SEDIMENT SAMPLING AND DISPOSAL**

The following comments are provided for sediment sampling and disposal information described in the Draft EIR. The comments are organized by chapter, section and page number.

### **Chapter 3 Project Description**

#### **A. Page 3-9, Section 3.6.2, Onshore Dewatering and Treatment.**

**EIR:** *“After drying, soil sampling will be conducted, and all dredged material will be loaded directly onto trucks for disposal at an approved upland landfill.”*

**Comment:** Please include a description of the contaminants that would be tested, the protocol that would be followed, the criteria upon which this protocol is based, and the thresholds that would be used to determine what material would require disposal at Kettleman Hills landfill rather than Otay landfill.

#### **B. Page 3-9, Section 3.6.3, Transportation and Disposal.**

**EIR:** *“For purposes of this project, it is assumed that 85 percent of the material will be transported from the staging area to Otay Landfill, which is approximately 15 miles southeast of the Shipyard Sediment Site. Although the sediment is not known to be classified as California hazardous material, it will be tested upon removal and prior to disposal. It is assumed for the purposes of this PEIR that up to 15 percent of the material will require transport to a hazardous waste facility (a Class I facility), which will most likely be the Kettleman Hills Landfill in Kings County, California, near Bakersfield.”*

**Comment:** Please include a description of the basis for the determination that 85 percent of the dredged material would be disposed of at Otay landfill, while 15 percent would be disposed of at the Kettleman Hills landfill. What is the assurance that only 15 percent of the dredged material would be disposed of at the Kettleman Hills landfill? Please also note that the Kettleman Hills landfill is near Hanford, not Bakersfield.

### **Chapter 4.1 Transportation and Traffic**

#### **A. Page 4.1-12, Section 4.1.4.2, Potentially Significant Impacts.**

**EIR:** *“Once the dredge materials have been dried and tested, they will be loaded onto trucks for disposal at an approved landfill. For purposes of this project, it is assumed that 85 percent of the material will be transported from the staging area to Otay Landfill, approximately 15 miles southeast of the Shipyard Sediment Site. Although the sediment is not known to be classified as California hazardous material, it will be tested upon removal and prior to disposal. It is assumed for the purposes of this PEIR that up to 15 percent of the material will require transport to a hazardous waste facility (a Class I facility), which will most likely be the Kettleman Hills Landfill in Kings County, California, near Bakersfield. Based on the excavation quantity of 143,400 cubic yards (cy) and accounting for an additional 15 percent of bulk material due to the dewatering and treatment process, it is estimated that up to 250 truck trips per week could be required over an approximately 12.5-month period to remove the material. These estimates are a worst-case scenario and will be finalized during the design phase.”*

**Comment:** Please describe the traffic scenario that would occur in the event less or more than 15 percent of sediment would require disposal at the Kettleman Hills landfill and how it would affect the analysis of the project in the EIR. Please also note that the Kettleman Hills landfill is near Hanford, not Bakersfield.

#### **B. Page 4.1-12, Section 4.1.4.2, Potentially Significant Impacts.**

**EIR:** *“The most direct route to Otay Landfill is via I-5 south to State Route 54 (SR-54) east, to I-805 south. The most direct truck route to I-5 south, assumed for the proposed project condition, from potential Staging Areas 1 through 4 would be via East Harbor Drive and 28<sup>th</sup> Street. Trucks departing from Staging Area 5 would access I-5 south either directly from 24th Street-Bay Marina Drive or from West 32nd Street to 24th Street-Marina Way to Bay Marina Drive. Although the sediment is not known to be classified as California hazardous material, it will be tested upon removal and prior to disposal.”*

**Comment:** Please describe the most direct route to the Kettleman Hills landfill.

### **Chapter 4.3 Hazards**

#### **A. Page 4.3-20, Section 4.3.4.1, Potentially Significant Impacts.**

**EIR:** *“Once a sediment stockpile meets the analytical and strength requirements, the material would be certified for disposal, manifested, loaded into on-road trucks (typically using a largewheeled front-end loader), weighed to document compliance with U.S. DOT regulations, transported, and deposited at the selected disposal facility.”*

**Comment:** Please provide a detailed description of the analytical and strength requirements that will be used to determine the appropriate landfill disposal location, including the protocol that would be followed, the criteria upon which this protocol is based, and the thresholds that would require disposal at the Kettleman Hills landfill rather than Otay landfill. Please also provide a reference for the U.S DOT weighting regulation.

## **AIR QUALITY AND GREENHOUSE GAS EMISSION ANALYSIS**

The following comments are provided for the air quality and greenhouse gas sections of the Draft EIR. The comments are organized by section and page number.

### **Chapter 4.6 Air Quality**

#### **A. Section 4.6.3.1, Thresholds for Construction Emissions, Page 4.6-8; Section 4.6.3.2, Thresholds for Operational Emissions, Page 4.6-8; and Section 4.6.4.1, Less Than Significant Impacts, Fugitive Dust, Page 4.6-11.**

**Comment:** Thresholds for construction and operational emissions in Sections 4.6.3.1 and 4.6.3.2 do not include a threshold for emissions of fine particulate matter (PM<sub>2.5</sub>). However, the discussion of fugitive dust impacts on page 4.6-11 states that emissions of PM<sub>2.5</sub> are less than significant because emissions are relatively small and do not exceed the significance threshold for PM<sub>2.5</sub>. How was it determined that PM<sub>2.5</sub> emissions do not exceed a significance threshold, when no threshold is identified? We suggest revising this section to include a quantitative threshold for PM<sub>2.5</sub>, particularly because the San Diego Air Basin is a state non-attainment area for PM<sub>2.5</sub>. Furthermore, we would suggest using the U.S. Environmental Protection Agency’s “Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards” threshold of 55 pounds per day (published September 2005).

#### **B. Section 4.6.4.1, Less than Significant Impacts, Regional Air Quality Strategy, Page 4.6-10.**

**EIR:** *“Although the proposed project would exceed the construction threshold for NOX, the proposed project does not obstruct implementation of the RAQS.”*

**Comment:** Please explain the rationale for the conclusion quoted above, which appears to be internally inconsistent.

**C. Section 4.6.4.1, Less than Significant Impacts, Fugitive Dust, Page 4.6-11.**

**Comment:** This EIR section does not include a summary of the methodology for the analysis, including construction assumptions, the source of the emissions factors, and any models used in the analysis. The methodology for the analysis, construction assumptions, and model descriptions are provided in the air quality technical report in Appendix G. It would be helpful for the reader to have a description of this information provided in this section of the EIR. In addition, neither the Draft EIR nor the air quality technical report provides the source for the emissions factors used to determine criteria pollutant emissions, which should be included.

**Comment:** Please identify why CO<sub>2</sub> emissions are included in Table 4.6-3, Daily Construction Emissions by Phase (lbs/day), and Table 4.6-4, Peak Daily Construction Emissions (lbs/day). This section of the EIR does not include any analysis related to emissions of CO<sub>2</sub>. It may be appropriate to delete this information from this section of the EIR.

**Comment:** In Table 4.6-3, a list of construction equipment is only provided for the ‘Covering of Sediment Near Structure Phase.’ Please provide the equipment assumptions for all construction phases.

**Comment:** The construction phases listed in Table 4.6-4, Peak Daily Construction Emissions (lbs/day) and Table 4.6-3, Daily Construction Emissions by Phase (lbs/day), are inconsistent. Table 4.6-4, Peak Daily Construction Emissions (lbs/day), includes a Dredging Operations phase that is not included in Table 4.6-3, Daily Construction Emissions by Phase (lbs/day). It is unclear which construction activities would occur during the Dredging Operations phase and are contributing to the peak daily construction emissions. We suggest identifying construction phases listed in Table 4.6-3 that are included in the Dredging Operations phase.

**D. Section 4.6.4.1, Less than Significant Impacts, Health Risk Assessment, Pages 4.6-11 through 4.6-15.**

**Comment:** We would suggest including a figure that identifies the truck routes and location of the residences included in the HRA to clarify the analysis.

**EIR:** *“Perkins Elementary School is located within 0.25 mile of Staging Areas 1 and 2. Significant health risks are not expected to result from the operation of equipment at the staging areas. Assuming the peak daily emissions shown in Table 4.6-4 occur continuously for 2.5 years (a conservative assumption) results in lifetime cancer risk levels below 1.5 in a million at Perkins Elementary School.”*

**Comment:** The text prior to the EIR text quoted above includes an analysis and methodology that only discusses truck trips and therefore it appears as though the operation of construction equipment at the staging areas was not included in the HRA. Please clarify, and if the analysis only includes truck trips, explain the basis for determining that construction equipment would not contribute to an exceedance of the lifetime cancer risk threshold. We would suggest including the construction equipment operation in the HRA analysis, if it is not included already.

**E. Section 4.6.4.2, Potentially Significant Impacts, Equipment Exhaust and Related Construction Activities, Pages 4.6-16.**

**EIR:** *“In addition, Mitigation Measures 4.6.8 through 4.6.14 would also reduce the generation of NOX emissions in the area through the use of retrofitted diesel powered equipment, low-NOX diesel fuel, and alternative fuel sources. However, there is no reasonable way to ensure that that retrofitted diesel-powered equipment, low-NOX diesel fuel, and alternative fuel sources would be available during the construction period; therefore, it is not possible to quantify reductions in NOX emissions that would result from implementation of Mitigation Measures 4.6.8 through 4.6.14.”*

**Comment:** An emissions reduction estimate can be made for some of the mitigation measures as written. The URBEMIS 2007 model and South Coast Air Quality Management District’s CEQA Air Quality Handbook provide emission reduction estimates for construction mitigation measures. We suggest providing estimates for the listed mitigation measures, assuming that they would be implemented. Include any additional feasible mitigation measures from these sources that may apply to the proposed project. Furthermore, please explain why there is no reasonable way to ensure that the required equipment and technology would be available, and include this as a reason why this impact is significant and unavoidable. Please also explain why the EIR cannot require the use of retrofitted diesel powered equipment, low-NOX diesel fuel, and alternative fuel sources as mitigation measures, since these measures ordinarily are feasible and available.

**F. Section 4.6.4.2, Potentially Significant Impacts, Odors, Pages 4.6-16.**

**EIR:** *“Adherence to the mitigation measures identified for equipment would reduce impacts associated with objectionable odors from the operation of diesel-powered construction equipment.”*

**Comment:** Please explain why the mitigation measures proposed to reduce emissions of criteria pollutants would also reduce odors related to construction equipment to a less than significant level. Additionally, the discussion of impacts for criteria pollutants determined that it cannot be ensured that these mitigation measures would be fully implemented; therefore, impacts related to NOx emissions are significant and unavoidable. If these measures cannot be fully implemented, why wouldn’t odor emissions also be significant and unavoidable?

**G. Section 4.6.4.2, Potentially Significant Impacts, Odors, Pages 4.6-16 and 4.6-17.**

**EIR:** *“With implementation of this measure, and given the distance between the active areas within the potential Staging Areas and the nearest sensitive receptors, it is anticipated that odor impacts would be reduced to less than significant with the adherence to identified mitigation measures (Threshold 4.6.5).”*

**Comment:** Please identify the nearby sensitive receptors and the distance between these receptors and the staging areas. Also, please identify the evidence that supports this conclusion.

**H. Section 4.6.4.3, Mitigation Measures, Pages 4.6-17 through 4.6-21.**

**Comment:** Mitigation measures are included for fugitive dust emissions because of San Diego Air Pollution Control District requirements. However, the analysis identifies no significant impacts. Generally, it is inappropriate to identify mitigation measures for non-significant impacts. We would suggest moving these mitigation measures to the impact analysis and stating that compliance with these measures would occur, rather than listing them as mitigation.

**I. Section 4.6.5, Cumulative Impacts, Pages 4.6-21 and 4.6-22.**

**Comment:** The cumulative analysis discusses ozone and ozone precursors. However, the SDAB is also in non-attainment for PM<sub>10</sub> and PM<sub>2.5</sub>. Even though the proposed project would not result in direct impacts related to these pollutants, a cumulative impact may still occur. Therefore, we suggest revising this analysis to address cumulative impacts related to PM<sub>10</sub> and PM<sub>2.5</sub>. This revision would potentially result in the identification of a new significant cumulative impact.

## **Chapter 4.7 Climate Change and Greenhouse Gas Emissions**

### **A. Section 4.7.4.1, Less than Significant Impacts, GHG Emissions, Page 4.7-11.**

**EIR:** *“To date there is insufficient information to establish formal, permanent thresholds by which to classify projects with relatively small, incremental contributions to the State’s total GHG emissions as cumulatively considerable or not.”*

**Comment:** The Bay Area Air Quality Management District has adopted a quantitative threshold for annual project-level GHG emissions, and several other districts and jurisdictions have proposed interim quantitative thresholds, including the County of San Diego and South Coast Air Quality Management District. In addition, in August 2010, the City of San Diego issued a memorandum to the Environmental Analysis Section titled “Updated – Addressing Greenhouse Gas Emissions from Projects Subject to CEQA.” This memorandum proposes a 900 metric ton CO<sub>2</sub> equivalent screening level threshold for determining when potential project-level GHG impacts may occur. The GHG significance threshold discussion should be revised to identify a significance threshold for GHG project emissions. An Air Resources Board (ARB) threshold is discussed, but it is stated on Page 4.7-13 that the significance conclusions of the analysis do not rely upon the ARB’s proposed draft guidance. We suggest that the analysis use the County of San Diego’s screening level threshold for annual emissions of 900 metric tons CO<sub>2</sub> equivalent published in the Interim Approach to Addressing Climate Change in CEQA Documents, consistent with the approach used for determining potential impacts related to the Convair Lagoon Confined Disposal Facility Alternative found in Section 5.10.7, Greenhouse Gas Emissions/Climate Change of the EIR. Please also note that the assertion that “insufficient information to establish formal, permanent thresholds by which to classify projects with relatively small, incremental contributions to the State’s total GHG emissions as cumulatively considerable or not” is inconsistent with recent judicial decisions, which identify satisfactory thresholds of significance and methodologies for analyzing and mitigating potential impacts associated with GHG emissions. See, e.g., *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) \_\_ Cal.App.4<sup>th</sup> \_\_, 2011 DJDAR 10267 (July 12, 2011); *Santa Clarita Organization for Planning the Environment v. City of Santa Clarita* (2011) \_\_ Cal.App.4<sup>th</sup> \_\_, 2011 DJDAR 11239 (July 28, 2011).

### **B. Section 4.7.4.1, Less than Significant Impacts, GHG Emissions, Pages 4.7-11 through 4.7-13.**

**Comment:** We disagree with the conclusion that because construction emissions are a single-event contribution limited to a short period of time, these emissions are not considered to impede or interfere with achieving the state’s emission reduction objectives in AB 32 and are inherently less than significant. As stated on Page 4.7-12 of the EIR, CO<sub>2</sub> emissions persist in the atmosphere for a substantially longer period of time than criteria pollutant emissions. Therefore, CO<sub>2</sub> emissions from construction emissions would not settle out following the completion of construction. These emissions would contribute to the state and global GHG inventory. Therefore, additional analysis is required in order to provide substantial evidence of a less than significant related to construction emissions. We suggest amortizing the construction emissions over a given time period to determine the contribution of construction emissions to annual GHG emissions, and comparing annual GHG emissions to a quantitative threshold. This approach is consistent with the recommendations of the County of San Diego, the South Coast Air

Pollution Control District, and the County of San Luis Obispo Air Pollution Control District. We suggest amortizing construction emissions over a 30-year time period, consistent with the guidance of the County of San Diego and the approach used for determining potential impacts related to the Convair Lagoon Confined Disposal Facility Alternative found in Section 5.10.7, Greenhouse Gas Emissions/Climate Change of the EIR.

**C. Section 4.7.4.1, Less than Significant Impacts, GHG Emissions, Pages 4.7-11 through 4.7-13.**

**Comment:** Please explain why only CO<sub>2</sub> emissions are quantified for the proposed project. Emissions from construction equipment would also result in emissions of methane (CH<sub>4</sub>) and nitrogen dioxide (N<sub>2</sub>O).

**Appendix G Air Quality Analysis**

**A. Section 2.6.1, Dredging and Capping Operations, Page 14.**

**EIR:** *“Contaminated areas under piers and pilings will be remediated through subaqueous, or in-situ, capping. In-situ capping is the placement of clean material on top of the contaminated sediment.”*

**Comment:** The importation of clean material would require truck trips. Were these truck trips included in the calculation of construction emissions? They are not identified in the Total Construction Emissions tables provided in Appendix A of the Draft EIR. If they were not included, please revise the analysis to include them. Additional truck trips would result in increased emissions of criteria pollutants.

**B. Section 4.2, Greenhouse Gas Emissions/Global Climate Change, Pages 41 and 42.**

**EIR:** *“Therefore, for this analysis, CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O are considered due to the relatively large contribution of these gases in comparison to other GHGs produced during the project construction and operation phases.”*

**Comment:** Only CO<sub>2</sub> emissions are provided in Table F. Please revise the analysis to include the projected emissions of CH<sub>4</sub> and N<sub>2</sub>O. Identifying emissions of CH<sub>4</sub> and N<sub>2</sub>O would result in additional emissions of CO<sub>2</sub> equivalent.

**C. Section 4.2, Greenhouse Gas Emissions/Global Climate Change, Page 42.**

**EIR:** *“The GHG emissions resulting from increased electricity demand are modeled using GHG emissions factors from the United States Energy Information Administration. The GHG emissions resulting from the energy used for water delivery, treatment, and use are modeled using GHG emissions factors from the California Energy Commission (CEC). The GHG emissions resulting from solid waste disposal are modeled using GHG emissions factors from the California Integrated Waste Management Board, recently renamed the Department of Resources Recycling and Recovery, or CalRecycle.”*

**Comment:** Only quantified construction emissions are provided in the report. We suggest deleting this statement or providing the calculated emissions related to electricity, water, and solid waste. These GHG sources would result in additional emissions of CO<sub>2</sub> equivalent.

## MITIGATION MEASURE REVISIONS FOR THE CONVAIR LAGOON ALTERNATIVE

The following comments are provided for the mitigation measures identified within Section 5.7, Convair Lagoon Alternative to ensure that the mitigation language for this alternative is consistent with the proposed project. The comments are organized by section and page number and shown in ~~strikeout~~/underline.

### Section 5.10.3 Air Quality, Page 5-94

**Threshold 5.10.3.2: Conformance to Federal and State Ambient Air Quality Standards.** Mitigation Measure ~~4.6.1~~ through Mitigation Measure ~~9-4.6.15~~ described in ~~section 4.6, Air Quality, of this EIR the Air Quality Analysis for the Shipyard Sediment Project (Appendix G)~~ would ~~also~~ be required for the Convair Lagoon Alternative. Under this alternative, these mitigation measures would apply to all construction activities associated with the Convair Lagoon Alternative and would not be limited to dredging and dewatering activities at the Shipyard Sediment Project Site. Additionally, mitigation measure 5.10.3.1 would reduce impacts related to emissions of nitrogen oxides during the barge transfer of shipyard sediment to the CDF. The Convair Lagoon Alternative would not exceed the significant thresholds during any other phase of construction, or during operation; therefore, no mitigation measures are required for the other phases of construction or operational emissions.

**Mitigation Measure 5.10.3.1: Prohibit Tug Boat Idling.** The ~~applicant-contractor~~ responsible for the tug boat operation shall ensure that tug boats not be allowed to idle during any barge loading and unloading activities, unless the tug boat is actively engaged in operations. Contract specifications shall be included in the construction documents, which shall be reviewed by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) prior to issuance of a construction permit. The San Diego Water board shall verify implementation of this measure.

**Threshold 5.10.3.4: Objectionable Odors.** Implementation of Shipyard Sediment Site Mitigation Measure ~~4.6.15 10~~ described in ~~the section 4.6, Air Quality, of this EIR Analysis for the Shipyard Sediment Project (Appendix G)~~ would require the application of a mixture of Simple Green and water (a ratio of 10:1) to the excavated sediment as part of odor management to accelerate the decomposition process and shorten the duration of odor emissions. Dewatering would take place in the same location as the Proposed Project; therefore, potential odor impacts as a result of the Convair Lagoon Alternative are also expected to be less than significant due to the distance between the proposed dewatering pad areas from the nearest sensitive receptors (see Section 4.6, Air Quality for information about the proposed project). However, similar to the Proposed Project, this impact would remain a temporary significant and unavoidable impact because it is difficult to predict the nature and duration of odor emissions from decomposition.

### Section 5.10.4 Biological Resources, Pages 5-119 through 5-123

### ***Mitigation Measures***

The following mitigation measures are required to reduce significant direct and indirect impacts to the California least tern, eelgrass habitats, jurisdictional waters and San Diego Bay surface water to a level below significance. The measures are organized to correlate to the various significant impacts identified above by issue area. In addition to the mitigation measures identified below, the Convair Lagoon Alternative would be required to implement mitigation measures 4.5.1 through 4.5.11, listed in section 4.5, Biological Resources, listed in the Shipyard Sediment Site EIR. Under this alternative, mitigation measures 4.5.2 through 4.5.9 would be applied to all construction activities associated with the Convair Lagoon Alternative and would not be limited to the dredging and dewatering activities at the Shipyard Sediment Project Site.

**Mitigation Measure 5.10.4.2:** Prior to the start of any phase of construction, a pre-construction survey for the invasive alga, *Caulerpa taxifolia*, shall be performed by a qualified biologist—certified Caulerpa surveyor, retained by the construction contractor. The survey shall be completed during the high growth period of *Caulerpa taxifolia* , March 1<sup>st</sup> though October 31<sup>st</sup>. Surveys outside the high growth period shall be allowed on a case-by-case basis by the appropriate regulatory agency in consultation with NMFS and CDFG. ~~This~~The survey shall be conducted in conformance with the Caulerpa Control Protocol version 3 (National Marine Fisheries Service 2007), prior to any bottom disturbing events, and shall be submitted to the National Oceanic and Atmospheric Administration (NOAA) Fisheries/CDFG Contacts within 15 days of survey completion. The following survey conditions shall be followed, but not limited to:

- a) Prior to initiation of any permitted Disturbing Activity , a pre-construction survey of the project Area of Potential Effect (APE) shall be conducted to determine the presence or absence of *Caulerpa*. Survey work shall be completed not earlier than 90 days prior to construction and not later than 30 days prior to construction.
- b) In the event that *Caulerpa* is detected, construction shall not be conducted until such time as the infestation has been isolated, treated or the risk of spread from the proposed construction is eliminated in accordance with *Caulerpa* Control Protocol version 3 (National Marine Fisheries Service 2007).

If *Caulerpa taxifolia* is not found during the above survey, then construction can proceed, as approved by NOAA Fisheries/CDFG Contacts. If *Caulerpa taxifolia* is found during the survey, the following measures shall be followed:

- a) NOAA Fisheries/CDFG Contacts shall be notified within 24 hours of the discovery.
- b) All *Caulerpa taxifolia* assessment and treatment shall be conducted under the auspices of the CDFG and NOAA Fisheries as the state and federal lead agencies for implementation of *Caulerpa* eradication in California.
- c) Within 96 hours of NOAA Fisheries/CDFG Contact notification, the extent of the *Caulerpa* infestation within the project site shall be fully documented. *Caulerpa taxifolia* eradication activities shall be

undertaken using the best available technologies at the time and will depend upon the specific circumstances of the infestation. Eradication activities may include in situ treatment using contained chlorine applications, and may also incorporate mechanical removal methods. The eradication technique is subject to change at the discretion of NOAA Fisheries and CDFG and as technologies are refined.

- d) The efficacy of treatment shall be determined prior to proceeding with permitted activities. To determine effectiveness of the treatment efforts, a written Sampling and Analysis Plan (SAP) shall be prepared. The plan shall be developed in conjunction with the CDFG and NOAA Fisheries and shall be approved by these agencies prior to implementation.

The San Diego Water Board shall verify implementation of this mitigation measure.

~~If *Caulerpa taxifolia* is not found, then construction can proceed. If it is found, then the following shall be undertaken by the project applicant to eradicate this species in the construction area prior to beginning any bottom disturbing activities, including but not limited to:~~

- ~~a) The disturbing activity shall not be conducted until such time as the infestation has been isolated, treated or the risk of spread from the proposed disturbing activity is eliminated;~~
- ~~b) National Oceanic and Atmospheric Administration (NOAA) Fisheries/CDFG Contacts shall be notified within 24 hours of the discovery;~~
- ~~c) Within 96 hours of notification, the extent of the *Caulerpa* infestation within the site APE shall be fully documented. *Caulerpa* eradication activities shall be undertaken using the best available technologies at the time and will depend upon the specific circumstances of the infestation. This activity may include in situ treatment using contained chlorine applications, and may also incorporate mechanical removal methods. The eradication technique is subject to change at the discretion of NOAA Fisheries and CDFG and as technologies are refined.~~

**Mitigation Measure 5.10.4.3: Eelgrass and Local Policy Conflicts.** For direct and indirect eelgrass impacts at Convair Lagoon, and in accordance with the current Southern California Eelgrass Mitigation Policy (SCEMP), approximately 7.22 acres of eelgrass shall be replaced by the construction contractor and a qualified biologist through a transplant method to achieve a 1.2:1 replacement ratio for the loss of 6.01 acres of existing eelgrass, through the following methods. Prior to implementation of these methods, a pre- and post-construction survey shall be conducted by a qualified biologist, retained by the construction contractor, within 30 days of project commencement and completion. The pre-construction eelgrass habitat mapping survey for the Convair Lagoon Site shall be completed by the applicant within 120 days of the proposed start dates of each construction phase in accordance with the SCEMP to document the amount of eelgrass that will likely be affected by construction activity. The post-construction survey shall be completed by the applicant within 30 days

of the completion of construction. These surveys shall be used to determine specific mitigation:

- a) A final eelgrass mitigation plan shall be prepared and approved by the ACOE, acting in conjunction with the resource agencies, including the San Diego Water Board, NMFS, USFWS, EPA, and the CDFG. The results of the pre-construction survey shall be integrated into a final Eelgrass Mitigation Plan for the project and used to calculate the amount of eelgrass to be mitigated. The plan shall include details and descriptions regarding the chosen mitigation site, transplant methods, program schedule, 5-year monitoring program, success criteria, and actions to undertake for failed mitigation goals, consistent with the SCEMP. Transplantation of eelgrass shall occur only with the written approval of the CDFG.
- b) Mitigation methods for eelgrass shall include creating eelgrass habitat at one or more locations within the San Diego Bay by raising the bay floor elevation to approximately -5 ft MLLW with dredged materials and planting eelgrass on the elevated plateau. Replacement mitigation for eelgrass may occur in one or more of the following locations, as approved by the resource agencies NMFS, USFWS, EPA, CDFG and ACOE: 1) Naval Training Center (NTC) channel; 2) Harbor Island – West Basin; 3) Adjacent to Convair Lagoon; 4) A-8 Anchorage; 4) South Bay Borrow Site; 5) South Bay Power Plant Channel; 6) South Bay Power Plant; and 7) Emory Cove Channel. Brief descriptions of these potential mitigation sites are described in Table 5-25 below.
- c) ~~The post-construction eelgrass survey shall be submitted to the NMFS, USFWS, CDFG, and the Executive Director of the CCC, as well as the San Diego Water Board. An eelgrass mitigation plan shall be prepared and approved by the ACOE, acting in conjunction with the resource agencies, including NMFS, USFWS, EPA, and the CDFG. The plan shall include details and descriptions regarding the chosen mitigation site, transplant methods, program schedule, 5 year monitoring program, success criteria, and actions to undertake for failed mitigation goals, consistent with the Southern California Eelgrass Mitigation Policy. Transplantation of eelgrass shall occur only with the written approval of the CDFG.~~
- d) Criteria for determination of transplant success at the selected mitigation site shall be based upon a comparison of vegetation coverage (area) and density (turions<sup>1</sup> per square meter) between the adjusted impact area (original impact area multiplied by 1.2 or the amount of eelgrass habitat to be successfully mitigated at the end of 5 years) and the mitigation site(s). The extent of vegetated cover is defined as that area where eelgrass is present and where gaps in coverage are less than 1 meter between individual turion clusters. Density of shoots is defined by the number of turions per area present in representative samples within the original impact area, control or transplant bed. Specific criteria are as follows:

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<sup>1</sup> A turion is a specialized overwintering bud produced by aquatic herbs.

- The mitigation site shall achieve a minimum of 70 percent area of eelgrass and 30 percent density as compared to the adjusted project impact area after the first year.
- The mitigation site shall achieve a minimum of 85 percent area of eelgrass and 70 percent density as compared to the adjusted project impact area after the second year.
- The mitigation site shall achieve a sustained 100 percent area of eelgrass bed and at least 85 percent density as compared to the adjusted project impact area for the third, fourth, and fifth years.
- The final determined amount of eelgrass to be transplanted shall be based upon the guidelines in the SCEMP. If remedial transplants at the project site are unsuccessful, then eelgrass mitigation shall be pursued at the secondary eelgrass transplant location.

The San Diego Water Board shall verify implementation of this mitigation measure.

**Mitigation Measure 5.10.4.4: Jurisdictional Waters and San Diego Bay Surface Loss.** New bay habitat shall be created within an alternative location of the San Diego Bay via excavation of shoreline and creation of tidal influence in previously non-tidal areas. The mitigation ratio for the loss of 8.5 acres of intertidal and subtidal habitats would occur at a 1:1 ratio. The coastal salt marsh habitat shall be mitigated at a 4:1 ratio (i.e., creation of 0.44 acres of salt marsh habitat for 0.11 acres impact). This shall include:

- a) The removal and disposal or reuse of historic fills;
- b) Grading the site to a desired hydrologic condition of channels, subtidal basins, and intertidal flats in order to support desired compensatory habitat; and
- c) Planting pilot vegetation plots to allow for natural expansion of marshland vegetation.

The creation of new bay surface water habitat may occur in one or more of the following locations, as approved by the resource agencies NMFS, USFWS, EPA, CDFG and ACOE: 1) Grand Caribe Isle in the Coronado Cays; 2) D Street Fill just across the Sweetwater Channel from the National City Marine Terminal; 3) the South Bay Power Plant; 4) the Salt Works; and/or; 5) Pond 20 adjacent to the Salt Works. The approved mitigation site shall be lowered from upland elevations to create intertidal and subtidal habitats, except for the South Bay Power Plant, which would require filling the existing intake and discharge channels of the power plant to create tidal lands. The mitigation ratio for intertidal and subtidal habitats would occur at a 1:1 ratio; however, the coastal salt marsh habitat would have to be mitigated at a 4:1 ratio. These ratios would require the replacement of approximately 3.9 acres of intertidal habitat, 4.49 acres of shallow subtidal habitat, 0.31 acres of moderately deep and deep subtidal habitat (which would most likely be replaced as intertidal habitat due to habitat value) and 0.44 acres of coastal salt marsh habitat. Brief descriptions of the potential mitigation

locations for jurisdictional and San Diego Bay surface loss impacts are described Table 5-26. [The San Diego Water Board shall verify implementation of this measure.](#)

### **Section 5.10.6 Geology and Soils, pages 5-167 and 5-168**

**Mitigation Measure 5.10.6.1: Detailed Site-specific Geotechnical Investigation.** Prior to construction of the Convair Lagoon Alternative, a detailed site-specific geotechnical investigation will be conducted [by a qualified geologist retained by the applicant](#) to determine specific geologic recommendations for the development of the containment barrier and storm drains. Areas of hydro-collapse, soft ground, expansive soils, compressible soils, liquefaction, shallow groundwater, and corrosive soils will be identified as part of the geotechnical investigation. The investigation will specifically address the proposed containment barrier, storm drains, and asphalt improvement stability in these identified geologic hazard areas. The geotechnical investigation [shall be submitted to the San Diego Water Board for review and approval, prior to the issuance of a construction permit. The geotechnical investigation](#) will comply with the specifications provided in the Naval Facilities Engineering Command (NAVFAC), DM-7.2, Foundations and Earth Structures, dated September, as well as the City of San Diego Building Division plans and the City of San Diego Engineering Department local grading ordinances. Recommendations made in conjunction with the geotechnical investigations will be implemented during construction. [The qualified geologist shall periodically confirm that these measures are being implemented](#), including (as appropriate) but not necessarily limited to the following actions:

1. Over-excavate unsuitable materials associated with the confinement structure and replace them with imported engineered fill.
2. Confine unstable soils to deeper fill areas of the site.
3. Perform densification of soils in the area beneath the proposed containment structure through geotechnical engineering methods such as stone columns, compaction grouting, or deep dynamic compaction.
4. Select an engineering foundation design to accommodate the expected effects of liquefaction. Examples of types of foundation design that might be appropriate given the soil conditions include gravel bedding for the storm drain pipes and a pipe bell with flexibility to accommodate differential settlement.
5. Consider potential corrosion issues related to storm drain pipe degradation in the design of this improvement where it would contact corrosive soils or be subject to other corrosive forces.
6. Establish and implement a long-term monitoring and repair program to monitor the integrity of the asphalt, containment barrier and storm drains. Key features of the program include determination of the periodic review, the type of review, identification of potential

problems that may occur in the future, and the methods that would be used to rectify any problems discovered.

The San Diego Water Board shall verify implementation of this mitigation measure.

### **Section 5.10.8 Hazards and Hazardous Materials, Page 5-212**

#### ***Mitigation Measures***

The Convair Lagoon Alternative is required to implement Mitigation Measures 4.3.1 through 4.3.8, listed in the Shipyard Sediment Site EIR, Section 4.3, Hazards and Hazardous Materials. These measures require the implementation of: secondary containment, a dredging management plan, a contingency plan, a health and safety plan, a communication plan, a sediment management plan, and a hazardous materials transportation plan and traffic control plan. Under this alternative, mitigation measures 4.3.1 through 4.3.8 would be applied to all construction activities associated with the Convair Lagoon Alternative and would not be limited to dredging and dewatering activities at the Shipyard Sediment Project Site.

### **Section 5.10.9 Hydrology and Water Quality. Pages 5-227 to 5-230**

#### ***Mitigation Measures***

In addition to the following mitigation measures, the Convair Lagoon Alternative is required to implement mitigation measures 4.2.1 through 4.2.13, listed in the Shipyard Sediment Site EIR, Section 4.2, Water Quality. Under this alternative, mitigation measures 4.2.1 through 4.2.9 would apply to all construction activities associated with the Convair Lagoon Alternative and would not be limited to dredging and dewatering activities at the Shipyard Sediment Project Site.

#### **Threshold 5.10.9.1: Water Quality, All Phases Construction**

**Mitigation Measure 5.7.9.1: Construction Equipment Spills/Leaks.** Prior to construction, ~~the contractor/operator for~~ construction ~~contractor of the Convair Lagoon Alternative~~ shall create and implement a Spill Prevention, Control and Countermeasure Plan, which shall apply to oil and hazardous material spills into waters of the U.S., in quantities that may be harmful. ~~The contractor/operator shall submit the Spill Prevention, Control and Countermeasure Plan to the San Diego Water Board for review.~~ The Spill Prevention, Control and Countermeasure Plan shall identify the contractor's responsible parties, precautionary measures to reduce the likelihood of spills, and the spill response and reporting procedures in case a spill occurs, in compliance with the requirements of the Clean Water Act.

~~During operations, personnel shall perform visual monitoring of equipment for spills or leaks.~~ If a spill/leak is observed, the equipment shall be immediately shut down, the source of the spill/leak shall be identified, and the spill/leak shall be contained, in accordance with the measures identified in the Spill Prevention, Control and Countermeasure Plan.

In the event of a spill of materials from a barge, an oil boom shall be deployed in the vicinity of the barge to facilitate the containment of the spill/leaks. An oil boom shall be located on site during all construction activities so that it is readily available in the event of a spill. Oil retrieval and disposal shall be conducted in accordance with the alternative's Spill

Prevention, Control and Countermeasure Plan. The San Diego Water Board shall be responsible for ensuring adherence to the requirements of this measure.

~~The following BMPs shall be implemented to minimize the potential for accidental spills/leaks to occur and to minimize fluids entering the bay: Oils and fuels shall be housed in secondary containment structures. Spill cleanup kits shall be available at various locations on site. Personnel shall be trained on the locations of the kits and their proper use and disposal.~~

~~Personnel shall be trained on the potential hazards from accidental spills and leaks to increase awareness of the materials being handled and the potential impacts.~~

~~Routine maintenance and inspections of equipment containing oil, fuel, or other hazardous fluids shall be performed to identify worn or faulty parts and needed repairs.~~

~~The contractor/operator for construction of the Convair Lagoon Alternative shall create and implement a Spill Prevention, Control and Countermeasure Plan, which shall apply to oil and hazardous material spills into waters of the U.S., in quantities that may be harmful. The Spill Prevention, Control and Countermeasure Plan shall identify the contractor's responsible parties, precautionary measures to reduce the likelihood of spills, and the spill response and reporting procedures in case a spill occurs, in compliance with the requirements of the Clean Water Act.~~

~~During operations, personnel shall perform visual monitoring of equipment for spills or leaks. If a spill/leak is observed, the equipment shall be immediately shut down, the source of the spill/leak shall be identified, and the spill/leak shall be contained, in accordance with the measures identified in the Spill Prevention, Control and Countermeasure Plan.~~

~~In the event of a spill of materials from a barge, an oil boom shall be deployed in the vicinity of the barge to facilitate the containment of the spill/leaks. An oil boom shall be located on site during all construction activities so that it is readily available in the event of a spill. Oil retrieval and disposal shall be conducted in accordance with the alternative's Spill Prevention, Control and Countermeasure Plan.~~

**Mitigation Measure 5.10.9.2: Water Quality Monitoring.** Water quality monitoring shall be performed during in-water activities (e.g., demolition, dredging, rock placement, dredge placement) to obtain real-time data so that potential impacts to water quality can be quickly detected and activities modified to avoid impairing or degrading water quality. A system for monitoring of turbidity in the water column in the vicinity of dredging and excavation activities shall be used to assist the operator in adjusting or modifying operations to reduce temporary water quality impacts. Prior to commencement of demolition activities on the project site, the construction contractor shall prepare ~~and implement~~ a water quality monitoring plan which shall include the evaluation of turbidity levels. The construction contractor shall submit the water quality monitoring plan to the San Diego Water Board for review and approval. Upon

[approval by the San Diego Water Board, the construction contractor shall implement the water quality monitoring plan.](#) Monitoring shall be performed in at least three locations. The monitoring stations shall be located: 1) approximately 500 feet upstream of the work area, 2) immediately inside the work area, 3) approximately 250 feet downstream from the work area. The station immediately inside the work area shall be visually monitored. If a turbidity plume is observed, then monitoring of the 250-foot and 500-foot stations shall begin. Samples collected at the 250-foot station are intended to be a screening tool to warn of potential impacts that may reach the 500-foot station. If the water quality samples downstream from the work area are 20 percent greater than the upstream samples, then work shall be halted, the cause of the exceedance shall be identified and additional BMPs, depending on the particular activity (demolition, rock placement or sediment placement) shall be implemented and monitored for effectiveness. Additional BMPs may require modifications to the activity (duration, frequency, location, equipment, and sequencing). [The San Diego Water Board shall be responsible for ensuring adherence to the requirements of this measure.](#)

**Threshold 5.10.9.1: Water Quality, Phase 1 Construction**

**Mitigation Measure 5.10.9.3: Low Tide Demolition.** Demolition activities for submerged structures during Phase 1 of construction shall be scheduled during low tides to expose as much of the submerged structures as possible and to reduce disturbance of sediments or a silt curtain shall be used to control turbidity. [The San Diego Water Board shall be responsible for ensuring adherence to the requirements of this measure.](#)

**Threshold 5.10.9.1: Water Quality, Phase 4 Construction**

**Mitigation Measure 5.10.9.4: Dredging Equipment Selection.** The dredge bucket shall be enclosed to reduce re-suspension caused by dredge spoils falling back into the bay. [The San Diego Water Board shall be responsible for ensuring adherence to the requirements of this measure.](#)

**Mitigation Measure 5.10.9.5: Dredging Placement BMPs.** The following BMPs shall be implemented to minimize the re-suspension or spillage of sediments during the placement of dredged materials:

- ~~1. Dredged soils shall not be stockpiled on the floor of the San Diego Bay;~~
- ~~2. The dredge bucket shall be fully closed before withdrawing from loading activities;~~
- ~~3. The dredge bucket and barge shall not be overfilled. This shall occur by visual monitoring and visual markings on the barge to indicate limits of fill;~~
- ~~4. A spill plate shall be placed between the barge and the landside to prevent spillage from falling into the bay water;~~
15. A weir shall be constructed on or near the containment jetty to provide a method to release site water displaced during the placement of fill in CDF. The weir may consist of a low crest in the

containment jetty or a pipe in the structural fill of the barrier. The weir outflow will be monitored as described in mitigation measure 5.10.9.2. If an exceedance occurs, a filter fabric barrier or floating silt curtain shall be installed across or just outside of the weir outflow to minimize the potential for suspended sediments to enter the water outside of the CDF.

- [26.](#) Multiple bites with the dredge bucket shall be prohibited;
- [37.](#) Dredged material shall be placed carefully and the bucket drop height shall be limited to minimize splashing or sloshing, based on crane operator observations and water quality turbidity;
- [48.](#) Barge movement and speed shall be in conformance with safe practices.

[The San Diego Water Board shall be responsible for ensuring adherence to the requirements of this measure.](#)

**Table 1. Cost Estimate Project Assumptions and Draft EIR Project Assumptions Consistency Analysis**  
*(Revised Tentative Cleanup and Abatement Order and Draft Technical Report: Table A32-26, Supporting Calculations for Section 32.7.1 Technological and Economical Feasibility)*

ID No.	Cost Estimate Item	Cost Estimate Project Assumption	Draft EIR Project Description Inconsistency	Applicable Environmental Issues
<b>Construction Preparation</b>				
C1	Mobilizations and Demobilizations	Estimate assumes work is completed in 3 construction seasons.	<p>Construction schedule identified in the Draft EIR Project Description on page 3-5. Page 3-5 states: <i>“There are two scheduling options for completion of the remedial action. The first scheduling option is expected to take 2 to 2.5 years to complete. Under this option, the dredging operations would occur for 7 months of the year and would cease from April through August during the endangered California least tern breeding season.</i></p> <p><i>The second option is to implement the remedial plan with continuous dredging operations, which would be expected to take approximately 12.5 months to complete. This scenario assumes that the dewatering, solidification, and stockpiling of the materials would occur simultaneously and continuously with the dredging. Also assumed under this compressed schedule option is that dredging operations could proceed year-round, including during the breeding season of the endangered California least tern (April through August).”</i></p>	Air Quality
C2	Demolition	Includes demolition of dormant BAE pier.	Demolition of the BAE pier is not included in Chapter 3, Project Description, of the Draft EIR.	Air Quality / Transportation and Circulation
<b>Dredging</b>				
D1	Dredging Surface/Subsurface debris	Unknown quantity. Estimates assume 5% of dredge volume. Pricing includes landfill disposal.	Chapter 3, Project Description, of the Draft EIR states landfill disposal will occur at Kettleman Hills Landfill in Kings County (15%) and Otay Landfill in San Diego County (85%).	Air Quality / Transportation and Circulation
D2	Engineering controls (silt curtain, oil boom)	Estimate assumes work is completed in 3 construction seasons.	Three construction seasons is not consistent with construction schedule identified in the Draft EIR Project Description on page 3-5.	Air Quality
D3	Additional dredging	28,100 cy from two feet of dredging over one half of the remedial area. Same unit costs as for constrained dredging from inner shipyard.	Chapter 3, Project Description, of the Draft EIR does not include two feet of additional dredging. Total dredge volume is identified as 143,400 cy on page 3-6.	Air Quality / Transportation and Circulation

ID No.	Cost Estimate Item	Cost Estimate Project Assumption	Draft EIR Project Description Inconsistency	Applicable Environmental Issues
<b>Marine Structures</b>				
M1	Placement of quarry run rock for protection of marine structures	21,887 tons. No structural retrofit of structures is assumed to be necessary. Estimated costs assume setback of dredging from marine structures and revetments, and placement of quarry run blankets or berms to reinstate lateral resistance.	Chapter 3, Project Description, has no mention of quarry run rock for protection of marine structures.	Air Quality / Transportation and Circulation
<b>Sediment Offloading and Disposal</b>				
S1	Acquisition/lease of sediment offloading area	An off-site sediment staging area will be needed in the vicinity of the project area. Location is unknown at this time. Costs assume a three year construction period.	Three year construction period is not consistent with construction schedule identified in the Draft EIR Project Description on page 3-5.	Air Quality
S2	Rehandling and Dewatering	Assumes stockpiling of sediments prior to transport to landfill and addition of lime or cement mixture to facilitate dewatering. Based on 171,500 CY estimate.	Chapter 3, Project Description, states 164,910 CY, including cement-based reagent for dewatering quantity.	Air Quality / Transportation and Circulation
S3	Transportation and Disposal at Landfill	Assumes disposal at regional hazardous waste landfill outside of San Diego County (Copper Mountain in Nevada). Assuming 257,250 tons.	Landfill disposal will occur at Kettleman Hills Landfill in Kings County (15%) and Otay Landfill in San Diego County (85%).  39,579 tons disposed of at Kettleman Hills Landfill & 224,278 tons disposed of at Otay landfill (page 3-9).	Air Quality / Transportation and Circulation
<b>Underpier Remediation</b>				
U1	Placement of clean sand cover	Assumes ½ of dredged area receives 1-3 feet of sand.	Chapter 3, Project Description, assumes only contaminated soils under the pier and pilings will receive sand cover.	Air Quality / Transportation and Circulation
U2	Construction Management	Estimate assumes work is completed in 3 construction seasons.	Three construction seasons is not consistent with construction schedule identified in the Draft EIR Project Description on page 3-5.	Air Quality