



Phone: (858) -569-6005  
Fax: (858)-569-0968  
[www.sierraclubsandiego.org](http://www.sierraclubsandiego.org)

San Diego Chapter  
*Serving the Environment in San Diego and Imperial Counties*  
8304 Clairemont Mesa Boulevard, #101  
San Diego, California 92111

February 20, 2010

California Regional Water Quality Control Board  
San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, California 92123-4353  
Attn: Mr. Tom Alo

Subject: Initial Study/Environmental Checklist for Tentative Cleanup and Abatement  
Order No. R9-2010-0002 for the Shipyard Sediment Site, San Diego Bay  
Dated December 22, 2009

Dear Mr. Alo:

On behalf of the Sierra Club San Diego Chapter, I have reviewed the subject Initial Study/Environment Checklist for the Shipyard Sediment site and submit the following comments.

The subject Initial Study/Environmental Checklist does not clearly distinguish the potential impacts between the Alternative #2 Dredge and Landfill Disposal (preferred alternative) and Alternative #3 Dredge and Confined Aquatic Disposal. In our view there are potentially distinct environmental impacts between these two alternatives that must be addressed. The Initial Study/Environmental Checklist has not provided sufficient information to adequately scope the environmental issues for the Confined Aquatic Disposal portion of Alternative #3.

Our comments on the Initial Study/Environmental Checklist separate the two alternatives where there are notable differences in potential impacts.

Where we agree with the subject checklist no comments are made.

### **III. Air Quality**

Alternative # 2 Dredge and Landfill Disposal. The Initial Study/Environmental Checklist does not describe in any details of the equipment used for dewatering the dredged material for the shipyard site. Presumably the dewatering equipment would be diesel powered.

#### a) Potentially significant impact

The Port of San Diego Clean Air Program<sup>1</sup> and the San Diego Air Pollution Control District Air Quality Planning<sup>2</sup> should be consulted to avoid conflicts with their plans and mitigation measures. The State designations for the priority pollutants ozone (one and 8 hour) , PM 10 and PM 2.5 as Nonattainment.<sup>3</sup>

<sup>1</sup> Port of San Diego Clean Air Program <http://www.portofsandiego.org/environment/clean-air.html>

<sup>2</sup> San Diego County Air Pollution Control District Air Quality Planning. <http://www.sdapcd.org/planning/plan.html>

<sup>3</sup> San Diego Air Pollution District Fact Sheet Attainment Status <http://www.sdapcd.org/info/facts/attain.pdf>

b) Potentially Significant

The US Environmental Protection Agency should be consulted for measures to reduce the emissions from the diesel engines used in all the equipment associated with dredging<sup>4</sup>. USEPA also has list of verified diesel retrofit technologies<sup>5</sup>. A report prepared for the USEPA U.S. Environmental Protection Agency Office of Policy, Economics and Innovation provides information on incentives to reduce emissions for off-road diesel equipment used in port and construction sectors.<sup>6</sup>

c) Potentially significant.

The cumulative impacts from ozone and particulates (PM 10 and PM 2.5) would be significant. It will pose additional health risks to communities within the dredge site air shed including the Barrio Logan community. See XVII on environmental justice.

d) Less than significant with mitigation measures incorporated.

Trucks to haul the dewatered dredged material should meet strict emission standards. As noted above diesel truck exhaust emission retrofit systems are available that significantly reduces emissions. Additional measures noted in the staff Initial Study/Environmental Checklist should be evaluated and addressed in the EIS/EIR

e) Less than significant with mitigation measures incorporated

### III Air Quality

#### Alternative # 3 Dredge and Confined Aquatic Disposal (CAD)

The air quality impacts related to the dredge operations of the shipyard sediment site would be the same as Alternative #2. Air quality impacts related to the construction of the CAD, transport of the dredged matter from the shipyard site to the CAD and capping the site. These would include:

- o Construction
  - o Dredging CAD site
  - o Disposal of dredge spoils to a landfill
  - o Transport and placement of the construction material- revetments, cap
  - o Dewatering the site
- o Transport of the dredged matter from shipyard site to the CAD
- o Capping and restoration of the CAD site

The air quality impacts of Alternative #3 will be greater than the preferred Alternative #2. Staging the construction site for the CAD and truck disposal route of the dredge material is unknown.

### IV. Biological Resources (1)

a) Potentially significant impacts

#### Alternative #2 and #3 Shipyard dredging

The shipyard remedial dredging footprint will have potentially significant impacts on the aquatic ecosystem. The Tentative Cleanup and Abatement Order<sup>7</sup> Attachments 3 and 4 show the remedial footprints for BAE and NASSCO shipyards, respectively. The Draft Technical Report for the Tentative Cleanup and Abatement Order<sup>8</sup> (CAO) tacitly assumes that boundaries between the dredged and un-dredged sectors will be distinct without disturbing the un-dredged sector. Sediment core data (38 core samples) for chemicals, engineering characteristics (moisture, total solids, grain

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<sup>4</sup> USEPA EPA Clean Ports <http://www.epa.gov/diesel/ports/technologies.htm>

<sup>5</sup> USEPA Diesel Retrofit Technology Verification <http://www.epa.gov/otaq/retrofit/verif-list.htm>

<sup>6</sup> ICF Consulting, Emission Reduction Incentives for Off-Road Diesel Equipment Used in Port and Construction Sectors Final Report May 19, 2005 prepared for U.S. Environmental Protection Agency Office of Policy, Economics and Innovation <http://westcoastcollaborative.org/files/sector-marine/ICF%20Emission%20Reduction%20Incentives.pdf>

<sup>7</sup> California Regional Water Quality Control Board San Diego Region Tentative Cleanup and Abatement Order, No. R9-2010-0002

<sup>8</sup> California Regional Water Quality Control Board San Diego Region Draft Technical Report Vol. II

size, etc) and depth profiles of sediment grain size collected by Exponent<sup>9</sup> reveal that the bay sediments are not highly consolidated from surface to the depths where the core sampling encountered resistance (hard bottom, 1 to 8 feet). With few exceptions these sediment samples contain chemicals of concern that exceed the cleanup levels. The unconsolidated sediment samples indicate that dredged boundaries will not be well defined. Rather the sediment from the un-dredged sectors will slump into the dredged area forming a new unstable boundary that shift into the previously un-dredged sector. In those cases where these un-dredged sectors contain highly contaminated sediments, the dredging would expose these sediments and slump into the adjoining dredged sector. The unstable boundary will be contaminated at the upper surfaces of the un-dredged section as the movement of the sediment exposes a new surface that may not be in compliance with the sediment quality objectives. If not, additional dredging into the un-dredged sector will be needed until compliance with the CAO sediment quality objectives is obtained.

The size, surface area and depth, of the transition region between the remediated an un-remediated sector is dependent on the depth gradient caused by the dredging and other factors such as erosion from ship induced wave motion, tidal currents, storm drain flows and gravitational forces exposing subsurface sediments that may not be in compliance with the CAO.

**Invertebrates** The Draft Technical Report Vol. II Section 35 remediation plan only focuses on achieving the prescribed chemical cleanup levels but fails recognize that remediated sites must also provide suitable habitats that are necessary to recruit and re-colonize the benthic community. Cleanup alone will not be adequate. This subject is very complex<sup>10</sup>. A qualified benthic ecologist should be consulted to address this issue. Therefore, we do not agree with the discussion on invertebrates in the staff Initial Study/Environmental Checklist<sup>11</sup> that the impacts to the invertebrates are minimal, temporary and not significant.

**Fish and Essential Fish Habitat** The Initial Study/Environmental Checklist asserts that the impacts to fish and essential habitat are minimum and short term. It does not define short term. Is it weeks, months? It fails to recognize that the suspended sediments responsible for the turbidity may very likely contain contaminants of concern that are toxic to fish: copper, and PAH's.

A pre-remediation plan should be required. It should include contingencies to address the issues described above. There should be a core sampling plan that adequately addresses the subsurface sediment quality on both sides of the boundary between the sector to be dredged and the un-dredged sector.

The Draft Technical Report Volume I<sup>12</sup> reports the disadvantages of subaqueous capping in most shipyard locations subject to sediment disturbance are not viable candidates for in-place capping. But in the very next paragraph it states that that where contaminated sediments under the piers cannot be removed, subaqueous capping will be used. A ship moored at a pier will cause wave motion that can erode the cap. No discussion is presented on the possible depth differential (> 1 ft.) between the dredged and capped area that could exacerbate the erosion of the cap. Monitoring for cap integrity to contain the contamination is not discussed. The Campbell Shipyard capping has proved to be difficult to maintain the required cap depth over varying bottom depth.

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<sup>9</sup> Exponent NASSCO and Southwest Marine Detailed Sediment Investigation Vol. II, Appendix B Tables B2, B3, and B4

<sup>10</sup> NOAA Coastal Services Center Benthic Habitat Monitoring  
<http://www.csc.noaa.gov/benthic/mapping/applying/quality.htm>

<sup>11</sup> Initial Study/Environmental Checklist Dec 22, 2009 page 13

<sup>12</sup> California Regional Water Quality Control Board San Diego Region Draft Technical Report Vol. I page 32-2

Unless mitigated the issues discussed above the shipyard sites will not comply with the target remediation concentration for the contaminants of concern and thereby expose the biological resources including the marine vegetation, the invertebrates, fish and fish habitats and birds to unacceptable levels of contamination.

The above issues if not mitigated will have a substantial adverse effects on the natural community including the beneficial uses of the Bay as defined in the Basin Plan.

#### **IV Biological Resources (2)**

##### **Alternative #3 Confined Aquatic Disposal**

This alternative proposes to locate a CAD at an undefined location in San Diego Bay. Based on the description provided at the January 21, 2010 CEQA Scoping meeting presentation, the approximate footprint of the CAD is about 30 acres.

Potentially significant impacts a), b), c), d) The CAD could have significant adverse effects due to change in natural habitat of San Diego Bay in spite of the fact that it proposes to offset the adverse effect by adding an eelgrass habitat.

#### **XVII Mandatory Findings of Significance**

##### **Environmental Justice**

##### **Potentially significant impact**

The CAO must address the environmental quality and public health of low-income communities and communities of color.

Thank you for this opportunity to submit these comments.

Sincerely,



Edward Kimura  
Chair, Water Committee  
Sierra Club  
San Diego Chapter