



**May 12, 2014**

**Via Email to: [Commentletters@waterboards.ca.gov](mailto:Commentletters@waterboards.ca.gov)**

**Jeanine Townsend, Clerk to the Board, State Water Resources Control Board**

**RE: Comments on the Marina del Rey Harbor Toxics TMDL Reconsideration**

State Water Resources Control Board:

Below are the American Coatings Association Marine Antifouling Working Group comments regarding the Marina del Rey TMDL reconsideration:

- 1) The introduction of this revised TMDL is inappropriate at this time. Assembly Bill No. 425 was just signed into law on October 15, 2013 which directs the California Department of Pesticide Regulation (DPR) to develop mitigation measures regarding copper-based antifouling coatings to protect aquatic environments. They are required to take action by February 1, 2014. This TMDL ignores the intended purpose of the law and gets ahead of the scientific evaluation by DPR – the mitigation strategies should be given time to take effect. We believe The Los Angeles Regional Water Quality Control Board (LARWQCB) is acting without the complete scientific picture.
  
- 2) Until a proper risk assessment is conducted the changes required in the TMDL should not be adopted and the TMDL reconsideration should be denied. The recommendation for 85% of the vessels mooring in the marina to switch exclusively to biocide free coatings will just create a different input into Marina del Rey. As an example, page 21 the Study “IPM for Boats: Integrated Pest Management for Hull Fouling in Southern California Coastal Marinas” Culver et al, June 2012 the fouling biomass accumulation on different coatings, including copper based coatings, is measured. On average, the biocide free hard epoxy and slick foul release coatings contributed significantly more organic matter into the environment when the hulls were cleaned than did the copper based coatings from the same activity. The sediment monitoring study conducted for Marina del Rey in 2008, “Final Report: MARINA DEL REY HARBOR SEDIMENT CHARACTERIZATION STUDY”, Weston Solutions, April 2008; clearly reports that the variable most closely related to sediment toxicity was the percent (%) clay in the sediment. There was not as direct a relationship to copper and zinc and these metals are very likely tied up in the clay and rendered nonbioavailable. The relationship of toxicity to clay % indicates that it is the stagnant water body conditions affecting the sediment quality. To add the additional burden of more organic matter into the sediment and water column could make this environment unhealthy. Until this input is quantified the actions proposed by this TMDL should not be implemented

- 3) The “Final Report: MARINA DEL REY HARBOR SEDIMENT CHARACTERIZATION STUDY” did not use a Toxicity Identification Evaluation (TIE) for measured sediment toxicity. Without it the TMDL may be addressing a toxicity issue regarding copper and zinc in the sediment that does not even exist. The report indicates the key factor most directly related to sediment toxicity is percent clay. Higher Percent clay relates to lower grain size and potentially to anoxic sediment conditions. The TMDL reconsideration is possibly making the sediment toxicity worse not better as discussed in item 2 above. A TIE should be conducted to determine if the proposed actions of this TMDL will lead to worse sediment conditions.
  
- 4) The TMDL does not consider bioavailability of dissolved copper in the water column. The LARWQCB fact sheet regarding this TMDL states “Two marinas in Southern California already have similar TMDLs in place to reduce copper in the water: Shelter Island Yacht Basin in San Diego and Newport Bay in Orange County.” That is true and studies on both of those marinas have shown there is no or very limited toxicity in the water column due to copper. The peer reviewer of the Shelter Island Yacht Basin TMDL stated numerous times in Appendix 7 of that document that this was a serious flaw in the TMDL. The peer reviewer; Professor Kenneth W. Bruland, with the Ocean Sciences Department at University of California, Santa Cruz; wrote that instead of trying to reduce the copper load by such a drastic amount “A cost effective and reasonable alternative would be to carry out studies to assess the WER (Water Effects Ratio) for this basin” and “With this knowledge you would be in a position to arrive at a reasonable and justifiable numeric target concentration of dissolved Cu.” Later in Appendix 7 he added the margin of safety in the TMDL is “unreasonable” because it did not consider bioavailability. It is not prudent to institute the revised Marina del Rey TMDL when it doesn’t consider the primary flaw clearly identified in a nearly identical TMDL in California. Also, the US EPA has made completion of the marine Biotic Ligand Model (BLM) a priority in 2014. The BLM is a much less expensive method to develop a site-specific Cu standard for Marina del Rey than a Water Effects Ratio. The data to implement a BLM derived site-specific objective in Marina del Rey may already exist.
  
- 5) The TMDL does not even mention the risk associated with the increased likelihood of the transport and introduction of hull born invasive species. California’s Marine Invasive Species Act of 2003 renewed and expanded the Ballast Water Management for Control of Nonindigenous Species Act of 1999, to address the threat of nonindigenous species (NIS) introductions. An example of one extension of that law is the California State Lands Commission (Commission) has been charged with oversight and administration of the state’s program to prevent or minimize the release of NIS from vessels that are 300 gross registered tons and above. In their current draft of their “*Biofouling Management Regulations for Vessels Operating in California Waters*”, as can be found in this link [http://www.slc.ca.gov/Spec\\_Pub/MFD/Ballast\\_Water/Documents/Attachment\\_2\\_Biofouling\\_7June12.pdf](http://www.slc.ca.gov/Spec_Pub/MFD/Ballast_Water/Documents/Attachment_2_Biofouling_7June12.pdf), is the statement “*The purpose of the regulations in Title 2, Division 3, Chapter 1, Article 4.8 of the California Code of Regulations is to move the state expeditiously toward elimination of the discharge of nonindigenous species into the waters of the state or into waters that may impact the waters of the state, based on the best available technology economically achievable.*” Copper based antifouling coatings are more effective in some operating scenarios than the

biocide free coatings this TMDL is forcing vessels to apply. From “IPM for Boats: Integrated Pest Management for Hull Fouling in Southern California Coastal Marinas” Culver et al, June 2012p. 18, the authors conclude that the risk of spreading invasive species can be higher for coatings not containing active ingredients as demonstrated under the conditions in this study. The risk of increased hull born invasive species transport and introduction should be addressed before this TMDL is adopted and if the risk is greater without effective copper based antifouling coatings the revised TMDL should not be adopted.

- 6) The current TMDL and the TMDL reconsideration do not consider the actual beneficial uses of Marina del Rey. For example, Marina del Rey clearly will not be used and was not designed for shell fishing. It’s edges consists primarily of concrete walls not a natural shoreline. Considering California’s Porter Cologne Act “past, present and **probable** future beneficiary uses of” the water (PORTER COLOGNE ACT, ARTICLE 3. REGIONAL WATER QUALITY CONTROL PLANS, Section 13241 (a)) – it is clear that many beneficial uses regulated in TMDL have never existed in Marina del Rey in the first place. Marina del Rey is a man-made water body designed for one purpose – to moor vessels. The TMDL should reflect the actual past, present and **probable** future beneficiary uses of this water.

ACA requests the State Water Quality Board to not approve the Marina del Rey TMDL at this time. We recommend a state wide solution consistent with the spirit behind AB-425 and other regulatory actions both in California and worldwide that utilize the latest science.

Sincerely,  
John Hopewell

Director, International Affairs

PORTER COLOGNE ACT  
ARTICLE 3. REGIONAL WATER QUALITY  
CONTROL PLANS

§ 13240. Regional water quality control plans Each regional board shall formulate and adopt water quality control plans for all areas within the region. Such plans shall conform to the policies set forth in Chapter 1 (commencing with Section 13000) of this division and any state policy for water quality control. During the process of formulating such plans the regional boards shall consult with and consider the recommendations of affected state and local agencies. Such plans shall be periodically reviewed and may be revised.

§ 13241. Water quality objectives

Each regional board shall establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance; however, it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. Factors to be considered by a regional board in establishing water quality objectives shall include, but not necessarily be limited to, all of the

following:

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water.

§ 13391. California Enclosed Bays and Estuaries Plan

(a) The state board shall formulate and adopt a water quality control plan for enclosed bays and estuaries, which shall be known as the California Enclosed Bays and Estuaries Plan, in accordance with the procedures established by this division for adopting water quality control plans.

(b) As part of its formulation and adoption of the California Enclosed Bays and Estuaries Plan, the state board shall review and update the Water Quality Control Policy for Enclosed Bays and Estuaries of California, as adopted in 1974 pursuant to Article 3 (commencing with Section 13140) of Chapter 3, and incorporate the results of that review and update in the California Enclosed Bays and Estuaries Plan.

(c) State and regional offices, departments, boards and agencies shall fully implement the California Enclosed Bays and Estuaries Plan. Pending adoption of the California Enclosed Bays and Estuaries Plan by the state board, state and regional offices, departments, boards and agencies shall fully implement the Water Quality Control Policy for Enclosed Bays and Estuaries of California.

(d) Each regional board shall review and, if necessary, revise waste discharge requirements that are inconsistent with those policies and principles.

§ 13393. Adoption of objectives

(a) The state board shall adopt sediment quality objectives pursuant to the workplan submitted pursuant to Section 13392.6.

(b) The state board shall adopt the sediment quality objectives pursuant to the procedures established by this division for adopting or amending water quality control plans. The sediment quality objectives shall be based on scientific information, including, but not limited to, chemical monitoring, bioassays, or established modeling procedures, and shall provide adequate protection for the most sensitive aquatic organisms. The state board shall base the sediment quality objectives on a health risk assessment if there is a potential for exposure of humans to pollutants through the food chain to edible fish, shellfish, or wildlife.