

Santa Ana Regional Water Quality Control Board

November 6, 2015

Mr. Raymond Hiemstra, Associate Director
Orange County Coastkeeper
3151 Airway Avenue, Suite F-10
Costa Mesa, CA 92626

Response to Orange County Coastkeeper's September 23, 2015 Letter to Linda Candelaria, PhD, regarding "Comments on Newport Bay Copper TMDL Project Summary"

Dear Mr. Hiemstra:

This letter provides Regional Board staff's response to Orange County Coastkeeper's (Coastkeeper) comments/concerns stated in your September 23, 2015 letter to Dr. Linda Candelaria regarding "Comments on Newport Bay Copper TMDL Project Summary". We have listed each comment/concern separately with our responses below. We acknowledge Coastkeeper's commitment to improve water quality in Newport Bay, especially with respect to copper reduction in the Bay.

1) Coastkeeper comment/concern:

"The proposed timeline for compliance is too long. The project summary proposes a fifteen year timeline for compliance. This is unnecessarily long. The recently approved Marina Del Rey Copper TMDL has a ten year timeline, the Shelter Island Copper TMDL has a ten year timeline (after a five year voluntary compliance period) and ten years is long enough for Newport Bay. Copper paint is replaced at an interval of three years. A ten year time period means that there are three opportunities for the average boater to switch to alternative boat bottom paints. Even using a five year operational life for copper bottom paint means that every boat in Newport Bay will replace its bottom paint twice in a ten year time frame. The fact is that alternatives to copper boat bottom paint and the boatyard capacity to apply them exist now. The TMDL being developed should not have more than a ten year time frame." (para. 2)

Response: The Los Angeles Regional Board recently adopted a Copper (Cu) TMDL for Marina del Rey (February 2014) that has a ten year timeline for the reduction of Cu. Like Newport Bay, the largest source of Cu to Marina del Rey is Cu AFPs on boat hulls, and implementation of the ten year timeline includes the conversion of a number of boats from Cu to nontoxic paints. The Cu TMDL for Marina del Rey assumes approximately 4,750 slips in the marina. The Cu TMDL for Newport Bay assumes 10,000 slips. Regional Board staff believe a fifteen year time period for the reduction of Cu in the Bay is appropriate due to the significantly larger number of slips.

2) Coastkeeper comment/concern:

"The graphic in the TMDL project summary shows the compliance deadline for the TMDL will begin after the approval of the TMDL by the California Office of Administrative Law. This is unnecessary and adds delay to the implementation of the TMDL and confusion over the actual compliance deadlines. The TMDL being developed should include a specific start date, reporting deadlines and an end date as in the Marina Del Rey TMDL." (para. 3)

Response: The date for the compliance deadline is actually fifteen years from the approval of the Basin Plan Amendment by USEPA. USEPA approval is required for the TMDL to become effective for regulatory purposes. Regional Board staff believe that it is appropriate to base the compliance deadline on the effective date of the TMDL.

3) Coastkeeper comment/concern:

"It is important that the TMDL recognize that Upper Newport Bay is designated both as a State Marine Conservation Area and Ecological Reserve. These designations were created because of the critical ecological functions of the Upper Bay and its significance to the state and local community. It needs and deserves the highest level of protection from all forms of pollution. The TMDL being developed should specifically address this issue and the boats in the upper bay should be prioritized for copper reduction activities." (para 4)

Response: Regional Board staff are aware that Upper Newport Bay is designated as a State Marine Conservation Area, and that the upper part of the Upper Bay is an Ecological Reserve. Both Upper and Lower Newport Bay are high priority water bodies in the Santa Ana Region; however, we also note that the majority of the boats are located in the Lower Bay. Since the Bay is tidally influenced and since the largest source of Cu to the Bay is from Cu AFPs on boat hulls, it is likely that at least some of the Cu in the Upper Bay comes from boats in the Lower Bay. It is also likely that when boats in the Lower Bay (and lower Upper Bay) are converted from Cu to nontoxic paints, Cu should be reduced in the Upper Bay. The details of the locations and schedule of boat conversions are expected to be outlined in the implementation strategies proposed by the stakeholders for this Cu TMDL.

4) Coastkeeper comment/concern:

"The Non TMDL Action Plan for zinc should be developed along with the Copper TMDL. Zinc is a component of many alternative boat bottom paints and it is likely that these paints will be used as an interim measure as more non-biocide boat bottom paints are developed. Zinc is already found at elevated levels in sediment and fish tissue in Newport Bay. The Non TMDL Action Plan for zinc should work with the Copper TMDL to insure zinc concentrations to not increase as a result of the use of alternative boat bottom paints." (para 5)

Response: Regional Board staff agree that other metals, such as zinc (Zn), should be addressed along with Cu. Note, however, that only dissolved Cu exceeds the CTR criteria in water, and Board staff are recommending the conversion of boats from Cu AFPs to nontoxic paints *not* paints containing Zn or other biocides. In addition, sediment Zn and mercury (Hg), along with Cu, exceed the sediment ERM (Effects Range Median) guidelines in parts of Lower Newport Bay; therefore, implementation strategies to reduce sediment Cu (such as dredging) should also reduce sediment Zn and Hg.

5) Coastkeeper comment/concern:

"The TMDL should clearly show the use of the best available science for the development of compliance standards. While there is ample evidence of the impacts of copper to marine life, there remains confusion about the use of various methods to determine the appropriate compliance standard for Newport Bay. The TMDL development process should include a thorough and well documented discussion of the various alternatives available for the development of the TMDL compliance standard and why the resulting standard was used." (para 6)

Response: Regional Board staff agree that the best available science should be (and was) used in developing this Cu TMDL and implementation strategies. This is demonstrated in this Cu TMDL by Cu loading calculations based on data from a recent Cu hull paint loading study (Earley et al, 2013) and the use of the maximum allowable leach rate for Cu paints, set by the Department of Pesticide Regulation (DPR) in February 2014. The Metals Impairment Assessment documents the criteria used to assess the metals, including the saltwater CTR criteria for dissolved metals and the ERM sediment guidelines for sediment metals (outlined in the State Listing Policy). Fish tissue guidelines for human health were from OEHHA and USEPA, and fish tissue guidelines for wildlife were developed from the literature by Board staff and USFWS staff. The Metals Impairment Assessment will be released as part of Board staff's Metals TMDLs report. In addition, Board staff's report includes a thorough and well documented discussion of the science and reasoning behind this revised Cu TMDL and the proposed Non-TMDL Action Plans.

We thank Coastkeeper for its work in Newport Bay, and we look forward to our continued work together to achieve water quality compliance in the Bay, especially with respect to Cu.

If you have any questions/comments or would like to set up a conference call, please do not hesitate to contact Linda Candelaria, PhD (lcandelaria@waterboards.ca.gov) or Joanne Schneider (jschneider@waterboards.ca.gov).

Sincerely,



Kurt V. Berchtold
Executive Officer
Santa Ana Regional Water Quality Control Board

cc: Regional Board
David Rice, OCC