May 25, 2010

Email: commentletters@waterboards.ca.gov

Shakoora Azimi-Gaylon
Division of Water Quality
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814


Dear Shakoora Azimi-Gaylon:

The City of San Diego is pleased to provide you with comments regarding the draft 2010 Integrated Report. We believe that the Regional Board’s response to our comment letter dated October 26, 2009 does not adequately address the issue of toxicity results interpretation when evaluating water bodies during the §303(d) assessment process. Toxicity results for separate species, endpoints, and matrices should not be combined, and the practice of combining them for the purposes of developing the §303(d) list does not follow current scientific practice. For example, Comment ID 914, the Regional Board states that “In cases where sediment toxicity tests were also run along with the water toxicity tests, separate LOEs were written for the sediment and water toxicity tests, but the number of samples and exceedances were summed under one decision. The rationale for counting these data results together is that the State Board and San Diego Regional Board are interested in whether or not the water body is impaired for toxicity.”

- However, it is quite possible that toxicity exists in sediment, but not water, or overlying water and not sediments. Sediment toxicity and water toxicity should be considered separately, because the cause of toxicity is likely different.

- Combining species and test endpoints is not scientifically valid because, for example, Hyalella azteca are quite sensitive to pyrethroids and not others, while Ceriodaphnia dubia are sensitive to Diazinon and not pyrethroids. Combining the results of both species together does not help address the water quality issue. In fact, combining the two species together is misleading and confuses the issue. It has been shown through the use of TIEs that toxicity to Ceriodaphnia dubia was caused by Diazinon, and not pyrethroids.
Diazinon has been phased out and is not normally detected in ambient or storm water anymore. The current toxicity results to pyrethroids are an emerging problem. Using both species together causes unnecessary listings that are not based on science and initiates the development of unnecessary TMDLs, thereby reducing resources for valid projects.

When sediment toxicity is an issue, but both water and sediment are listed for toxicity, this results in the collection of both water and sediment toxicity samples to assess the cause(s) of toxicity. This indiscriminate sampling to address an ill-defined water issue is wasteful of resources when well-defined and known water quality issues are a higher priority; particularly when the initial results do not show significant problems to individually justify a 303(d) listing.

The practice of combining water and sediment toxicity, as well as separate species and endpoints results is not scientifically valid and should not be continued during future §303(d) list development. The interpretation of toxicity results should be considered, along with water quality data collected during testing, information about species sensitivity to known pollutants, and available monitoring data to determine whether or not a beneficial use is impaired. Using toxicity data as a stand-alone analysis is not the best use of limited resources, and diverts needed funds from pressing water quality issues.

If you have any questions regarding this matter, please contact me at kcolb@sandiego.gov or at (858) 541-4328.

Sincerely,

Kris McFadden
Deputy Director

KMrk

cc: Ruth Kolb