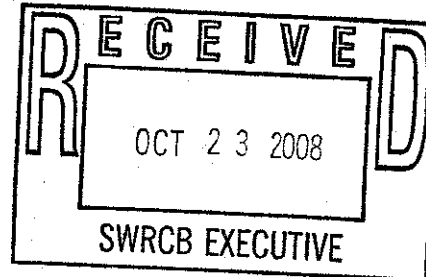


October 22, 2008

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814



Subject: Comment Letter – Water Quality Objectives for Cadmium and Related Implementation Methods

Dear Ms. Townsend:

The County of Orange Department of Public Works (formerly Resources and Development Management Department) appreciates the opportunity to review and provide comments on the scoping document, "Proposed Amendment to the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California to Establish Water Quality Objectives for Cadmium and Related Implementation Methods" dated June 16, 2008.

Overall, The County of Orange Public Works supports in principle the adoption of freshwater criteria equations without a specified hardness value, and the adoption of revised saltwater criteria. We believe that the proposed new criteria should be science-based and protective for sensitive aqueous species in waters with wide-ranging hardness values, which are typical in Southern California. Our specific comments on the new criteria are as follows:

1. It should be recognized that the proposed EPA 2001 Update Ambient Water Quality Criteria does not accurately address non-bioavailable fractions of cadmium in organic-rich waters wherein the hardness based approach may misrepresent environmental conditions. The USEPA recognized the limitations of hardness-based water quality criteria for copper and implemented a new Biotic Ligand Model (BLM) approach in February 2007. A BLM for cadmium is currently under development by EPA. Integration of the final cadmium BLM into the proposed policy should be considered.
2. Scientific evidence suggests that surface waters can be influenced by natural sources of trace metals including cadmium and that such occurrence should be taken into account by the proposed criteria. In the EPA 2001 document, it was stated that "(w)henever appropriate, a national criterion may be replaced by a site-specific criterion, which may include not only site-specific criterion concentrations, but also

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3. site-specific durations of averaging periods and site-specific frequencies of allowed exceedances". The policy should include a provision for the development of site-specific objectives for water bodies impacted by natural sources of cadmium.
4. State board staff should consider the analytical service cost impact of the new criteria and the current limited technical capabilities of commercial environmental laboratories. Under the proposed criteria, the new freshwater equation for relatively low hardness waters results in parts per trillion criteria continuous concentrations (CCCs). An accepted standard method (EPA method 200.8) provides reporting limits at the 0.1-1 parts-per-billion (ppb) level at a modest cost. However under the new proposed criteria the analytical service cost for reporting cadmium concentrations at sub-ppb levels dramatically increases up to four hundred percent (400%) per sample. This issue was recognized by the State's Surface Water Ambient Monitoring Program staff following the release of the Quality Assurance Management Plan (QAMP) in 2006. The QAMP was subsequently revised to provide end-users the scientific flexibility to set appropriate reporting limits. The proposed criteria should provide the same flexibility as the QAMP.

We appreciate the State Board's consideration of the above comments. We look forward to continuing to work with the State Board on these issues. If you have any questions regarding these comments, please contact Jian Peng at 714-567-6252.

Very Truly Yours,



Chris Crompton

Manager, Environmental Resources