

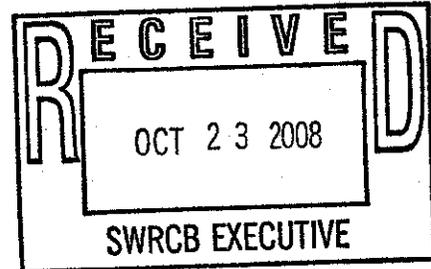


California Stormwater Quality Association™
Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation

October 23, 2008

Submitted via email commentletters@waterboards.ca.gov

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



Subject: Comments on the proposed amendment to the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) to establish water quality objectives for cadmium and related implementation methods

Dear Ms. Townsend:

On behalf of the California Stormwater Quality Association (CASQA), thank you for the opportunity to provide comments on the subject proposal to establish Water Quality Objectives (WQOs) for cadmium and related implementation methods during this California Environmental Quality Act (CEQA) scoping process. Please accept these comments submitted by CASQA on behalf of its members.

CASQA is composed of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout California. Our membership provides stormwater quality management services to over 26 million people in California and includes most every Phase I and many Phase II municipal programs in the State. CASQA was formed in 1989 to recommend approaches for stormwater quality management to the State Water Resources Control Board (State Water Board).

While the SIP does not apply to the regulation of stormwater discharges, the proposed action is of concern to CASQA because it involves the adoption of statewide WQOs for cadmium that will affect a number of water quality programs in California, including 303(d) listings, and TMDL development. In addition, the proposed action seeks to establish the implementation methodology for selecting hardness values not only for the cadmium WQOs but also for other trace metals whose objectives are hardness-based. These trace metals include copper, chromium (III), lead, nickel, silver and zinc.

The scoping document issued by the State Water Board on June 16, 2008, describes three alternatives for adoption of statewide WQOs for cadmium (noted below) and the State Water Board staff recommended the third alternative.

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1. No action – Allow the cadmium objectives contained in the California Toxics Rule (CTR) to remain in force in California.
2. Adopt the U.S. Environmental Protection Agency (USEPA) 2001 cadmium objectives for saltwater and fresh water regimes, with the exception that the freshwater cadmium objectives would be based on a fixed hardness value of 100 mg/l as CaCO₃.
3. Adopt the USEPA 2001 cadmium objectives for saltwater and fresh water regimes. The USEPA fresh water cadmium objectives are adjusted based on the hardness of the waters to which the objectives pertain. This alternative specifies that the hardness selection methodology used for the cadmium objective would be adopted for all hardness-based trace metals.

Another Alternative

CASQA believes that the State Water Board should consider another alternative to those proposed.

Adopt updated objectives derived through recalculation of the USEPA 2001 criteria using USEPA approved methodologies and more recent data not used in the 2001 USEPA criteria derivation. New data are now available for freshwater chronic toxicity caused by cadmium that meet USEPA data acceptability requirements for criteria derivation. These data were used in the development of water quality criteria for cadmium in the State of Colorado. These water quality criteria were subsequently approved by the USEPA. Similar work on updating the 2001 USEPA cadmium criteria with newer data has been performed in Idaho and is being proposed in New Mexico. These States are characterized as semi-arid, similar to California, and therefore should be included. Use of the additional data available in deriving cadmium objectives for California will allow the State to have more robust objectives that are based on the most recent science and consider species and conditions relevant to California waters.

Challenges of proposed alternatives

CASQA has reservations regarding the appropriateness of Alternative 2 and concurs with staff that this alternative should not be recommended. Given that the toxicity of cadmium is dependent on the hardness of ambient waters (i.e. the conditions that organisms are exposed to), it would be technically and environmentally unsound to adopt objectives that are protective only when the ambient hardness was equal to the fixed value upon which the objective would be based (e.g. hardness of 100 mg/l as CaCO₃). In some waters, the resulting WQOs may be insufficiently protective, while in many waters of the State, the WQOs would be unnecessarily stringent.

The proposed WQOs would reduce the concentrations of cadmium that the State Water Board considers to be acceptable in the waters of the State. CASQA is concerned whether the proposed WQOs are reasonable and attainable. For example, in one assessment of a southern California river where a six year data set was reviewed, dissolved concentrations of cadmium complied

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100% of the time with the acute and chronic CTR criteria and total recoverable concentrations of cadmium exceeded the acute CTR criteria in 8% of the data set and chronic criteria in 10 % of the data set. Under the proposed 2001 criteria, dissolved concentrations exceeded the chronic criteria in 20% of the data set and total recoverable concentrations exceeded the acute criteria in 10% of the data set and chronic criteria in 50 % of the data set. Consequently, the State Water Board's evaluation and analysis to support the final WQO proposal needs to address its statewide attainability and reasonableness consistent with Section 13000 of the Water Code. CASQA requests that the State Water Board carefully consider the factors set forth in Water Code Section 13000, with particular attention to the impact that naturally occurring background concentrations will have on existing and future anthropogenic demands on the waters of the State.

The proposed cadmium WQOs also go beyond federally mandated requirements. The proposed cadmium objectives are the result of a U.S. Fish and Wildlife Service (USFWS) determination that current freshwater and saltwater cadmium criteria were not protective of threatened and endangered species. USEPA did not revise the cadmium criteria in the CTR based on the USFWS recommendation; therefore the proposal goes beyond the requirements of federal regulation, and necessitates that the State Water Board analyze the factors required under Water Code Section 13241, in particular consideration of ability to achieve proposed objective and the economics of compliance and Section 13242, consideration of the means by which the proposed objective would be achieved.

Hardness Selection Methodology

CASQA believes that the establishment of a methodology to select hardness values for trace metals is an important policy decision and that the technical discussion of the methodology should be separated from the adoption of the cadmium objective. The choice of hardness selection methodology will affect not only the cadmium WQOs, but will also affect the calculation of the WQOs for copper, chromium (III), lead, nickel, silver and zinc, and therefore have impacts reaching beyond the establishment of the cadmium WQO. The importance of this issue warrants a more expansive notice than the reference to "related implementation methods" in the cadmium WQO proposal. CASQA recommends the State Water Board separate this issue and provide for an independent public review that considers all the affected trace metals, and ensures the adoption of a scientifically sound approach for the hardness methodology that is appropriately protective of the State's water bodies without being overly stringent.

In the context of scoping the environmental impacts of the State Water Board proposal for cadmium under CEQA, it is hard to separate the scoping of the impacts related to changes of the hardness selection methodology and those related to the change to the cadmium criteria. Providing further weight to the position to that this change should be separately evaluated, and the impact of this change on all the trace metals evaluated under CEQA and the Water Code.

WQO adoption vehicle

Finally, CASQA questions whether an amendment to the SIP is the proper vehicle for adopting statewide WQOs. The SIP is not a water quality control plan but rather an implementation plan

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for the CTR. The State Water Board should clarify this question in its follow up to the CEQA scoping meeting and evaluate the appropriateness of using the SIP to amend WQOs.

In summary, CASQA recommends that the State Water Board:

- Consider the alternative of developing cadmium objectives using the most recent toxicity data available;
- Base the cadmium objectives on site-specific receiving water hardness values;
- Consider the attainability of the WQOs in light of the reasonability provisions of Section 13000 and complete the analyses required by Sections 13241 and 13242 of the Water Code;
- Separately notice and consider the hardness selection methodology; and
- Evaluate the appropriateness of using the SIP as a vehicle for a WQO amendment.

CASQA appreciates the opportunity to provide comments during the CEQA scoping process on the proposed cadmium objectives and proposed methodology for trace metals whose objective are hardness-based and seeks to work collaboratively with the State Water Board in the adoption of objectives and implementing provisions that provide reasonable protection for beneficial uses in California.

Please feel free to contact me if you have any questions regarding these comments.

Very truly yours,



Chris Crompton, Chair
California Stormwater Quality Association

cc: Tam Doduc, Chair, State Water Board
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