

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Carrie Austin)  
MEETING DATE: June 14, 2006

ITEM: 10

SUBJECT: **Proposed Amendment to the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region to Establish New Water Quality Objectives and a Revised Total Maximum Daily Load (TMDL) and Implementation Plan for Mercury in San Francisco Bay - Hearing to Consider Proposed Basin Plan Amendment**

CHRONOLOGY: September 2004 - Board Adopted San Francisco Bay Mercury TMDL Basin Plan Amendment  
September 2005 - State Water Board remanded Mercury TMDL for revisions

DISCUSSION: This is the first of two hearings on a Basin Plan Amendment to revise the San Francisco Bay Mercury TMDL and implementation plan and establish new mercury water quality objectives for San Francisco Bay. The proposed Basin Plan amendment (Appendix A) and supporting Staff Report (Appendix B) were available for public comment for 45 days. This hearing provides an opportunity for stakeholders to communicate their interests directly to the Board and for Board members to ask questions of staff and stakeholders.

The second step in this two-part hearing process is an adoption hearing, currently scheduled for the August 2006 Board meeting. By then, staff will have prepared responses to all written comments received during the comment period and comments presented at this first hearing, and revised the proposed Basin Plan amendment and staff report as necessary. The Board may then fully consider the comments and responses and any proposed revisions to the Basin Plan amendment.

The proposed new water quality objectives and revised TMDL and implementation plan are responsive to the State Water Board's order which remanded the San Francisco Bay Mercury TMDL Basin Plan Amendment back to this Board for further consideration. Issues raised in the remand order can be grouped into the following areas:

- ❑ The TMDL may not require all wastewater sources to implement the most effective pollution prevention practices and treatment technologies.
- ❑ Dredging and watershed legacy sources of mercury affecting San Francisco Bay may need more attention.
- ❑ More public health risk reduction associated with consumption of mercury contaminated fish is needed.
- ❑ It is uncertain whether the TMDL bird egg wildlife target and the mercury water quality objective for marine waters will be attained by the TMDL.

It is important to note that not all issues raised by the remand order are expected to, or will need to be resolved by amending the Basin Plan or revising the Mercury TMDL Basin Plan amendment you adopted in 2004. For example, the remand order directs State Water Board staff to develop a pollutant offset policy. Nevertheless, in the Staff Report for the Basin Plan amendment now under consideration we include responses to all issues raised in the remand order.

Key components of the proposed Basin Plan amendment are summarized below.

*Pollution prevention* - Revisions include reduced municipal wastewater wasteload allocations to reflect pollution prevention actions, and new requirements to implement pollution prevention practices. We anticipate that aggressive implementation of mercury pollution prevention measures and programs will be necessary in the next 10 years if interim allocations are to be achieved.

*Individual wasteload allocations* - Revisions include a 40 percent reduction in municipal wastewater wasteload allocations, which will be applicable to most municipal wastewater dischargers. In recognition of good performance, we propose a 20 percent reduction in allocations for dischargers already employing advanced treatment technologies. No reductions are proposed for dischargers of less than 0.1 kg/year of mercury.

Industrial wastewater allocations have been reduced, correcting a calculation error discovered in our review of current performance. New reporting requirements are proposed for industrial dischargers to confirm that their performance is above average for similar facilities in the U.S.

Additional revisions include clarifications of how individual wasteload allocations will be implemented as effluent limitations. We also propose to change compliance triggers from exceedance of *both* mass and concentration mercury levels to exceedance of *either* mass or concentration mercury levels.

*Methylmercury monitoring* - Revisions include methylmercury monitoring requirements to be included in all NPDES permits.

*Dredging* - Revisions include a clarifying statement to ensure compliance with the already established Long Term Management Strategy for the Disposal of Dredged Material in the San Francisco Bay Region.

*Watershed legacy mercury inventory* - No Basin Plan amendment revisions are proposed. We conducted mercury mine site inspections and sampling this spring, and we are reviewing existing inventories of Bay margin and in-Bay toxic “hot spots” cleanup sites. We will present our results and propose priorities for addressing these sites in a report to the Board separate from the revised Basin Plan amendment.

*Risk reduction* - Revisions include calling for more specific activities that will reduce actual and potential exposure to mercury, and mitigate health impacts to those people and communities most likely to be affected by mercury in San Francisco Bay, such as subsistence fishers and their families.

*Clarify bird-egg monitoring target* - The proposed Basin Plan amendment includes a new water quality objective for mercury in fish tissue, developed by the U.S. Fish and Wildlife Service to be protective of wildlife and aquatic life. We propose to replace the TMDL numeric target for protection of wildlife with this new fish tissue objective. The bird-egg target is now a monitoring target.

*Address marine 4-day average objective* - The proposed Basin Plan amendment includes new mercury water quality objectives to protect human health and wildlife, as well as the rationale for vacating the marine waters four-day average water quality objective for mercury.

We received eleven comment letters (Appendix C) regarding the proposed Basin Plan amendment and staff report. We summarize some of the major comments and our initial reflections below. As noted above, full responses to all comments will be provided as part of the adoption hearing materials.

*U.S. Environmental Protection Agency* fully supports all aspects of the proposed Basin Plan amendment.

*BayKeeper, Clean Water Action, and NRDC* support some components of the proposed Basin Plan amendment, such as the more stringent wastewater wasteload allocations, pollution prevention requirements, required methylmercury monitoring, and stronger risk reduction language. They question or challenge other components. These include implementation of individual wastewater wasteload allocations in the context of aggregate limits rather than stand alone individual limits. We are confident that the scientific and legal basis of this approach is sound, and is consistent with the Board's policy decision made in 2004. Our response to comments document will discuss the pros and cons of this approach. These parties also call for more stringent risk reduction requirements for all dischargers. While we have already strengthened risk reduction requirements, we will look further into this possibility. However, the Board's authority on this matter is not clear. The commenters also raise concerns about a pollutant offset policy which is discussed separately below.

We should note that these parties call out other issues raised in the State Water Board's remand order for which we have not proposed explicit revisions to the Basin Plan. These include investigation of mercury in crude oil, legacy sources, and air sources. As we reported to the Board in November 2005, implementation efforts are already underway in these areas.

*Dischargers* representing wastewater, urban, and mine runoff sources raise several concerns. Several commenters also offer some support for the new water quality objectives and revised wasteload allocations and associated implementing mechanisms contingent on a pollutant offset option discussed below. Their concerns include the conservative nature of the new water quality objectives and the scientific basis of the wildlife water quality objective. Although we are confident that the objectives are appropriate and sound, we will give careful consideration to these concerns.

Many dischargers questioned the adequacy of the regulatory analyses we presented to support the new objectives and revised TMDL, particularly our economic and environmental impact analyses. We will give careful consideration to these concerns and make any appropriate improvements to our analyses.

Some dischargers also raised concerns regarding responsibility and requirements for risk reduction, which we will consider in conjunction with risk reduction issues raised by *BayKeeper, et al.*

The issue of pollutant offsets is one of interest and concern to many parties including the State Water Board, which as noted above has called for development of such a policy. The TMDL Basin Plan amendment previously adopted by the Board included conditional endorsement of an offset policy if it can be demonstrated that a) the program will be more cost effective and efficient means of achieving water quality standards, b) the relative potential for mercury from different sources to enter the food web is considered and c) the potential for adverse local impacts has been evaluated. The issue of pollutant offsets will certainly take time to resolve and is beyond the scope of this Basin Plan amendment.

RECOMMEN-  
DATION

No action is necessary at this time.

APPENDIX:

- A. Proposed Basin Plan Amendment
- B. Staff Report
- C. Comment Letters