

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

STAFF SUMMARY REPORT (Carrie Austin)
MEETING DATE: October 8, 2008

ITEM: 7

SUBJECT: **Proposed Amendment to the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region to Establish New Water Quality Objectives and Total Maximum Daily Loads and Implementation Plan for Mercury in Waters of the Guadalupe River Watershed** - Hearing to Consider Adoption of the Proposed Basin Plan Amendment

CHRONOLOGY: May 14, 2008 - Testimony Hearing

DISCUSSION: This is the second of two hearings on a proposed Basin Plan amendment to establish water quality objectives, Total Maximum Daily Loads (TMDLs), and an associated implementation plan for mercury in Santa Clara County's Guadalupe River watershed. At this hearing, the Board will be asked to consider adopting a Resolution (Appendix A) amending the Basin Plan to establish new water quality objectives, the mercury TMDLs, and the implementation plan. We will discuss revisions to the Basin Plan amendment (Appendix B) and supporting documentation that were made in response to stakeholder comments received during the public comment period, comments raised by Board members and the public at the May testimony hearing, and comments received at an outreach meeting held for watershed residents in September. Additional documentation in this package includes our revised Staff Report (Appendix C), Responses to Comments (Appendix D), copies of all written comments received during the public comment period (Appendix E), and the transcript of the May hearing (Appendix F).

The proposed Basin Plan amendment will:

- Vacate the existing 4-day average water quality objective for mercury in the Basin Plan;
- Establish fish tissue water quality objectives for mercury that protect piscivorous wildlife, and humans who consume watershed fish;
- Set numeric targets equal to the fish tissue objectives;
- Establish two TMDLs: one for methylmercury in impaired reservoirs and lakes, and one for total mercury in impaired creeks and the Guadalupe River. The total mercury TMDL is based on the sediment target for the already adopted San Francisco Bay mercury TMDL;
- Set allocations equal or proportionally equivalent to the TMDLs;
- Establish an implementation plan to achieve the TMDLs;

- Establish a monitoring program to evaluate progress toward meeting the targets, which relies on coordinated watershed monitoring; and
- Provide for an adaptive implementation strategy to incorporate new and relevant scientific information within ten years, such as modifications to the targets, allocations, or implementation plan.

Implementation will proceed in two 10-year phases. The first phase includes implementing effective source control measures for mining waste at mine sites, completing studies to reduce discharge of mining waste accumulated in Alamitos Creek, and completing studies of methylmercury and bioaccumulation controls in reservoirs and lakes. The goals for the second phase are the attainment of the watershed fish tissue targets and the San Francisco Bay mercury TMDL allocations to urban stormwater runoff and legacy mercury sources in the Guadalupe River watershed.

Since the May hearing, we have held several meetings with stakeholders as part of our effort to compile and understand comments received, prepare responses to comments, and consequently, revise the proposed Basin Plan amendment and supporting Staff Report, as appropriate. As a result of these meetings, and public comments received, we propose a number of changes to the draft Basin Plan amendment initially circulated in February 2008. The changes are consistent with the general purpose of and approach to the proposed Basin Plan amendment, and are all logical outgrowths of the evidence, testimony, and comments received. Some of the notable changes and clarifications include:

- **Allocations to Mercury Mining Waste**
We changed the allocation to mercury mining waste to waters upstream of reservoirs and lakes from 0.1 mg mercury per kg mercury mining waste (dry wt., median) to 0.2 mg mercury per kg mercury mining waste, which is the same as the allocation to mercury mining waste to waters downstream of the reservoirs and lakes. We also clarified that this allocation only applies to erodible mining process waste.
- **TMDLs and Impaired Waters**
As an outgrowth of the revised mercury mining waste allocation to waters upstream of reservoirs and lakes, we revised the TMDL for these upstream waters from 0.1 mg/kg to 0.2 mg/kg, which is the same as the TMDL for the downstream waters. In addition, we clarified that this TMDL applies to Alamitos Creek, Guadalupe Creek, and Guadalupe River.
- **Remediation Strategy for Alamitos Creek**
The proposed remediation strategy for Alamitos Creek, which is highly polluted with mercury mining waste, is to encourage a cooperative effort among the District, local agencies, and creekside property owners to undertake a comprehensive creek bank stability and habitat restoration project. We encourage the District to be the technical lead for this project, and to seek funding for it. We will identify mercury cleanup as a grant funding priority for the San Francisco Bay Region. Where necessary, the strategy calls for the Water Board to invoke its Water Code authority to compel upstream dischargers who initially discharged

mercury mining waste into depositional areas, to cleanup and abate mercury mining waste. Creekside property owners are responsible for providing reasonable access to the creek for project studies, construction, and monitoring, and for avoiding actions on their property that worsen the discharge of mercury mining waste into the creek.

- Daily load expression
We use a concentration-based approach for TMDLs and allocations, rather than a daily mass load, which several parties commented on. In response, while we propose to continue to use the concentration-based approach, we revised Section 8 of the supporting Staff Report to provide a daily load expression in grams per day that is consistent with the concentration-based approach.

Stakeholders requested a number of other changes that were not made for a variety of reasons. Environmental justice advocacy groups requested greater protection for subsistence fishers and inventory and investigation of local atmospheric deposition sources. We revised the adaptive implementation reviews as follows, “Additional focusing questions will be developed in collaboration with stakeholders prior to each review. We will contact the environmental justice community to discuss their concerns with human health risk, including but not limited to, exposure reduction and site-specific fish consumption rates. We will also reconsider the relative importance of mercury from sources other than mining in bioaccumulation.”

In conclusion, we believe that the proposed Basin Plan amendment and implementation plan, as revised since the May hearing, provide a balance between certainty and flexibility as well as provide guidance and opportunity for constructive, adaptive changes. By adopting this Basin Plan amendment, the Board will be taking a significant step towards resolving a very complex and serious water quality problem.

RECOMMEN-
DATION Adopt the proposed Basin Plan amendment.

APPENDICES: A. Tentative Resolution with Proposed Basin Plan Amendment
 B. Proposed Basin Plan Amendment Showing Changes Since February 2008
 C. Revised Staff Report
 D. Responses to Comments (Showing Changes to Supporting Staff Report
 Since February 2008)
 E. Comment Letters
 F. May 8, 2008, Testimony Hearing Transcript

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