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

STAFF SUMMARY REPORT (Bill Johnson, Richard Looker)
MEETING DATE: September 15, 2004

ITEM: 10

SUBJECT: **PROPOSED AMENDMENT TO THE WATER QUALITY CONTROL PLAN (BASIN PLAN) FOR THE SAN FRANCISCO BAY REGION TO ESTABLISH SAN FRANCISCO BAY MERCURY TOTAL MAXIMUM DAILY LOAD (TMDL) AND IMPLEMENTATION PLAN - Hearing To Consider Adoption of Proposed Amendment**

CHRONOLOGY: June 1998 - Staff Report on mercury in the northern reaches of San Francisco Bay
June 2000 - Preliminary Technical Report for San Francisco Bay Mercury TMDL
June 2003 - Final San Francisco Bay Mercury TMDL Project Report
June 2004 - Hearing to Receive Testimony on Proposed Basin Plan Amendment

DISCUSSION: This is the second hearing of a two-step process regarding the TMDL for mercury in San Francisco Bay. At this hearing, the Board will consider action on a Resolution (Appendix A) that would adopt a Basin Plan Amendment (Appendix B) to establish a TMDL and an implementation plan for the control of mercury in all San Francisco Bay segments. Supporting documentation, including analyses of alternatives and economic impacts, is contained in the Staff Report (Appendix C) and the Response to Comments (Appendix D). The Responses to Comments addresses public testimony and questions raised by the Board at June hearing (Appendix E) and all written comments submitted (Appendix F). Testimony will be limited at this hearing to comments on changes to the proposed Basin Plan Amendment made since the June hearing.

The proposed amendment would establish the following:

- Numeric targets for mercury concentrations in suspended sediment, fish tissue, and bird eggs that, when met, will protect sport and subsistence fishing (i.e., human health), protect wildlife and rare and endangered species, and attain water quality objectives.
- A total maximum yearly mercury load to San Francisco Bay of 706 kilograms, on average, which is roughly 60% of the existing load.
- Allocation of the total maximum yearly mercury load among the various mercury sources in the San Francisco Bay Region.
- A plan to implement the TMDL that includes actions to reduce mercury loads to achieve allocations, and actions to reduce mercury-related risks to humans and wildlife.
- A monitoring program that evaluates progress in meeting the established targets, ensures conformity with the allocations, and includes studies to improve technical understanding relevant to the mercury TMDL and implementation plan.

- An adaptive implementation strategy and schedule for reviewing progress toward meeting targets, implementing proposed actions, and evaluating continued appropriateness and effectiveness of proposed actions.

Since the June hearing, we have held numerous 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 where appropriate. As a result of these meetings and public comments received, we propose a number of changes to the previously circulated draft Basin Plan Amendment. 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 are as follows:

- Wastewater group and individual allocations are recalculated using the most recent data and a more robust statistical approach.
- Additional language is added to a number of sections to clarify that managing mercury-related risk to humans and wildlife is a priority and that effective risk management efforts are needed immediately because the impairment will persist for many years.
- More detail and clarification is added regarding how allocations will be implemented via Board actions, such as wastewater and urban stormwater NPDES permits.
- Our intent to address local air sources, if they are determined to be significant, is clarified.
- The concentration-based threshold for disposing dredged material in the Bay is defined.
- A number of implementation issues related to adapting the TMDL to changing information are clarified. These issues include how new information on mercury methylation will be considered; the timeframes for reevaluation/review of the TMDL, allocations, and implementation plan; and criteria for revising the allocation scheme and schedule.

Stakeholders requested a number of other changes that are not made for a variety of reasons. The wastewater management community requested that we eliminate individual allocations, but we are legally obligated to retain them. They requested that we restore the five-year averaging of loads proposed in the June 2003 Project Report, but such averaging is inconsistent with how we have computed load allocations and would have the effect of double counting year-to-year variability. They also requested that we accommodate growth when setting their wasteload allocations. However, allocations for growth would require comparable reductions in other allocations, which cannot be determined at this time, and no compelling evidence has been submitted to suggest that growth will pose a problem for wastewater dischargers in terms of meeting their allocations. Growth issues will be considered, if necessary, as part of the adaptive implementation strategy.

Urban stormwater agencies requested that the urban runoff wasteload allocation be separated into the portions coming from air deposition, stream banks, and a variety of other contributing sources. Data are not currently available on which to reliably base such an allocation scheme. They also requested that TMDL implementation be divided into a phase of technical studies followed by actions at some later date. Our adaptive implementation plan, which is consistent with the recommendations of the National Research Council (NRC 2001), is preferable to the proposed two-phase process. We propose to take reasonable initial steps based on available information implementation of urban stormwater management measures and activities already underway, and, later, adapt the plan as the results of these initial steps become clear and more information becomes available.

Environmental advocacy groups requested that we assign allocations to individual Central Valley sources. However, these sources are outside our jurisdiction, and the Central Valley Water Board is developing mercury TMDLs that will more effectively address these sources because it is more knowledgeable than we about how to address them. These groups called for assigning load reductions to air sources, but we do not have strong enough information on which to base such reductions at present, although we will consider such action in the future if appropriate. They also requested assigning wasteload allocations of zero until assimilative capacity is available. However, this is an overly stringent interpretation of TMDL regulations. The proposed wasteload allocations in conjunction with the other allocations are set at a level necessary to achieve water quality standards.

The proposed TMDL and implementation plan represent a working balance among competing interests and concerns. We are committed to balancing stakeholder concerns, and our numerous meetings with stakeholders since the June hearing attest to this commitment. Nevertheless, we expect that some concerns remain and will be raised at the September hearing. We firmly believe that the proposed Basin Plan Amendment and implementation mechanisms 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 crucial step toward solving 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 (Exhibit A)
B – Proposed Basin Plan Amendment showing changes since June 2004
C – Staff Report
D – Responses to Comments
E – June 16, 2004 Hearing Transcript
F – Written Comments