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

STAFF SUMMARY REPORT (Richard Looker)
MEETING DATE: May 9, 2007

ITEM: 7

SUBJECT: **Proposed Amendment to the Water Quality Control Plan (Basin Plan) to Establish Site-Specific Copper Water Quality Objectives (SSOs) and Implementation Plan for San Francisco Bay -** Hearing to Consider Basin Plan Amendment (no action will be taken)

CHRON-OLOGY: The Board adopted copper SSOs in 2002 for Lower San Francisco Bay.

DISCUSSION: This is the first of two hearings on a Basin Plan amendment (Appendix A) to establish site-specific copper water quality objectives (SSOs) for San Francisco Bay. This hearing includes a staff presentation of the proposed amendment and provides an opportunity for stakeholders to communicate their interests directly to the Board. At the second hearing, scheduled for the June 2007 Board meeting, the Board will consider adopting the proposed amendment and its accompanying resolution. As part of the June meeting package, we will provide comments received during the 45-day comment period (ended April 16), our responses to those comments, and any needed revisions to the proposed Basin Plan amendment and supporting staff report made in response to comments.

The proposed Basin Plan amendment will establish the following:

- Chronic and acute SSOs to replace the existing California Toxics Rule objectives (3.1 µg/L chronic, and 4.8 µg/L acute). The proposed SSOs for Suisun Bay, San Pablo Bay, Central Bay, and Lower Bay north of the Hayward Shoals are 6.0 and 9.4 (µg/L chronic / acute), and, for the portion of Lower Bay south of the Hayward Shoals, are 6.9 and 10.8.
- Defined ratios of total to dissolved copper (translators) for calculating effluent limits for wastewater sources discharging to deepwater portions of the Bay.
- A Bay-wide implementation strategy to ensure attainment of the copper SSOs. This strategy includes required studies to address technical uncertainties and control measures for major sources of copper (urban runoff, wastewater treatment facilities, lagoons, and marine anti-fouling coatings).
- An ambient water quality monitoring program designed to detect small changes in dissolved copper concentrations in the Bay that may trigger additional aggressive control measures.

The proposed site-specific objectives, as described in the supporting Staff Report (Appendix B), are based on the same state and federal guidance and policy for developing SSOs that were followed in 2002, when the Board developed the copper SSOs for Lower San Francisco Bay. The state Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California allows for consideration of SSOs when: the permit limits based on existing water quality objectives are not attainable, the current objectives are not appropriate for the water body, and there is no evidence of adverse water quality impacts. All these conditions are met for copper in San Francisco Bay. The proposed SSOs were derived using U.S. EPA-approved procedures that take into account the fact that copper toxicity to aquatic organisms is less in San Francisco Bay than in the laboratory water testing conditions that are the basis for the existing objectives. This reduced toxicity is due to the presence of dissolved carbon molecules that bind dissolved copper, making it unavailable for uptake by aquatic organisms.

We received timely written comments (Appendix C) from the U.S. EPA, Bay Area Clean Water Agencies, the Copper Development Association, and the City of San Jose. Most of the received comments are requests for minor clarifications relating to technical details in the Staff Report or implementation measures.

We received multiple comments regarding our requirement in the Implementation Plan section of the Basin Plan amendment that dischargers conduct or cause to be conducted technical studies to investigate possible copper sediment toxicity and sublethal effects on salmonids. The comments raised concerns about the details of these requirements and the regulatory mechanism for fulfilling these requirements.

The sublethal effects issue is important both locally and nationally, and we recognize that the Board, local dischargers and federal agencies like U.S. EPA and the National Marine Fisheries Service have a shared responsibility to ensure that relevant studies are supported and accomplished.

RECOMMEN-DATION: No action is necessary at this time.

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