

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

STAFF SUMMARY REPORT (Robert Schlipf)
MEETING DATE: March 9, 2011

ITEM: 6

SUBJECT: **New Requirements for Polychlorinated Biphenyls (PCBs) to Implement the Total Maximum Daily Load (TMDL) for PCBs in San Francisco Bay from Municipal and Industrial Wastewater Dischargers; Counties of Alameda, Contra Costa, Solano, Napa, Sonoma, Marin, San Francisco, San Mateo, and Santa Clara** - Amendment of Order No. R2-2007-0077

CHRONOLOGY: November 2007 – Board adopted NPDES Permit to implement San Francisco Bay mercury TMDL
February 2008 – Board adopted San Francisco Bay PCBs TMDL
March 2010 – U.S. EPA approved PCBs TMDL

DISCUSSION: The Revised Tentative Order (Appendix A) would establish limitations and requirements on the discharge of PCBs from more than 50 NPDES permittees who discharge treated wastewater to San Francisco Bay. The PCBs TMDL prescribed a number of implementation measures to address PCBs sources including measures to hold wastewater sources to current performance. The Revised Tentative Order's proposed requirements are consistent with the TMDL and include numerical effluent limits derived from the same discharge data used to establish the TMDL's wasteload allocations, compliance monitoring using the existing U.S. EPA-approved analytical method for PCBs, and loads monitoring using a low-detection level analytical method. We are proposing to establish these new PCBs requirements in one single action by amending the permit adopted by the Board in 2007 to implement the mercury TMDL. This would ensure consistent and coordinated implementation of both TMDLs' requirements.

We received ten comment letters on the tentative order (Appendix B), and have prepared responses to all the comments (Appendix C). The Revised Tentative Order reflects minor modification and clarification revisions made in response to comments. The revisions resolved some issues but other issues remain, and we anticipate testimony on them at the hearing. The two most significant unresolved issues involve:

- Inclusion of performance-based numeric effluent limits; and
- Use of concentration-based limits, instead of mass-based limits, without commensurate restrictions on discharge flow.

Numeric Effluent Limits

On the issue of inclusion of numeric effluent limits, U.S. EPA, Vallejo Sanitation District, South Bayside System Authority, Palo Alto, Bay Area Clean Water Agencies, and East Bay Municipal Utility District all commented. While U.S. EPA supports the Revised Tentative Order's numeric limits, the other commenters indicate that numeric effluent limits should not be included for various reasons that relate to the small data set available and concerns with the quality of data available. In short, these commenters believe that it's infeasible for the Board to calculate meaningful performance-based effluent limits because of these constraints.

First and foremost, U.S. EPA states that the Revised Tentative Order's numeric effluent limits are central to its support of the permit. While we recognize the data uncertainties and understand the other commenters' concerns about the proposed limits, federal regulations require numeric effluent limits unless infeasible. Using reasonable assumptions to account for data uncertainties, we believe that numeric performance-based effluent limits are feasible. Also, the limits could be revised in the future based on new monitoring data.

Concentration Limits Without Controls on Changes in Flow

Baykeeper expressed the concern that, because the tentative order only includes concentration-based limits, it does not account for potential increases in treated wastewater flow that could lead to an increase in the mass of PCBs discharged to San Francisco Bay.

While Baykeeper's comment is a valid concern in theory, actual discharge flow data from municipal wastewater treatment plants shows that flow increases are not a reality in the Bay Area. The data show a general decline in discharge flows over the past four years, likely due to water supply constraints and increased water conservation and water recycling. Based on this, we believe the concentration-based approach in the Revised Tentative Order will ensure mass loads do not increase.

We anticipate that some commenters may reiterate their concerns at the Board meeting.

RECOMMEN- DATION:

Adoption of the Revised Tentative Order

Appendices:

- A. Revised Tentative Order
- B. Comment Letters
- C. Response to Comments