

STATE WATER BOARD
RESOLUTION NO. 2005-0060

REMANDING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN
FOR THE SAN FRANCISCO BAY REGION TO INCORPORATE A TOTAL
MAXIMUM DAILY LOAD (TMDL) FOR MERCURY IN SAN FRANCISCO BAY

WHEREAS:

1. The San Francisco Bay Regional Water Quality Control Board (San Francisco Bay Water Board) adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on June 21, 1995, which was approved by the State Water Resources Control Board (State Water Board) on July 20, 1995 and by the Office of Administrative Law (OAL) on November 13, 1995.
2. On September 15, 2004, the San Francisco Bay Water Board adopted Resolution No. R2-2004-0082 ([Attachment 1](#)) amending the Basin Plan to incorporate a TMDL for mercury in the San Francisco Bay.
3. San Francisco Bay Water Board Resolution No. R2-2004-0082 delegated to the San Francisco Bay Water Board Executive Officer authority to make minor, non-substantive corrections to the adopted amendment, if needed, for clarity or consistency. By memorandum dated March 7, 2005, the San Francisco Bay Water Board Executive Officer made such a correction to the amendment ([Attachment 2](#)).
4. At the March 16, 2005 Meeting the State Water Board adopted Resolution No. 2005-0026 "Regarding an amendment to the Water Quality Control Plan for the San Francisco Bay region to incorporate a total maximum daily load (TMDL) for mercury in San Francisco Bay." That resolution stipulates that the TMDLs for the control of mercury in the Sacramento-San Joaquin Rivers Delta (Delta), Guadalupe River, and the San Francisco Bay be integrated and that specified issues be addressed.
5. At the June 16, 2005 Meeting, the State Water Board instructed staff to bring the San Francisco Bay mercury TMDL back for a potential vote at the July 2005 meeting and to obtain the following information:
 - a. Do the wasteload allocations require the municipal and industrial dischargers to perform at the most appropriate level considering available pollution prevention programs and existing technology?
 - b. What is the feasibility and cost of not disposing in the Bay dredged spoils containing mercury concentrations in excess of the sediment target?
 - c. What are other federal, state, and local agencies doing to control and remediate mercury in the environment, and how can we all coordinate our efforts to achieve greater reduction?
 - d. Consider the feasibility and cost of the suggestions titled, "Option 1.5", made by Baykeeper, Natural Resources Defense Council, and Clean Water Action, in their comment letter dated June 6, 2005.

6. California Water Code (CWC) section 13240 specifies that Regional Water Boards may revise Basin Plans. CWC 13242 requires a program of implementation of water quality objectives.
7. The State Water Board finds that the proposed TMDL for mercury does not adequately address the following issues. The Regional Water Board should:
 - a. Modify the wasteload allocations to ensure that they are set at a level that would require municipal and industrial point source dischargers to incorporate the most effective treatment methods and pollution prevention practices practicable for their discharges.
 - b. Specify monitoring requirements for methylmercury, the form in which mercury bioaccumulates.
 - c. Ensure that wasteload allocations do not result in National Pollutant Discharge Elimination System (NPDES) permits that allow dischargers to discharge concentrations of mercury that contribute to excursions above the mercury narrative water quality objective.
 - d. Ensure wasteload allocations take into account the significant variation in effluent quality among the various dischargers and that dischargers of high quality effluent should be recognized for their efforts, while dischargers of lower quality effluent should be required to perform better.
 - e. Ensure in-Bay disposal of dredged material containing mercury complies with the requirements of the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region, Management Plan 2001(LTMS).
 - f. Ensure that all sources of mercury that may affect San Francisco Bay have been adequately identified, such as Bay margin sites and mines within the San Francisco Bay watershed.
 - g. Clarify that the proposed bird egg target, as adopted and corrected is either a monitoring target or adopt an acceptable numerical target for the protection of wildlife.
8. The State Water Board supports the TMDL's requirement that the San Francisco Bay area refineries be required to investigate the environmental fate of mercury in crude oil and report findings to the San Francisco Bay Water Board, including the potential pathways by which crude oil mercury could be discharged to the Bay from Bay Area petroleum refining facilities, and the annual mercury loads associated with these discharge pathways.
9. The State Water Board should take an active role in coordinating the efforts to reduce cross-media and cross regional mercury pollution.
10. The United States Environmental Protection Agency (USEPA) has objected to the TMDL in that it is not clear whether the TMDL will result in attainment of the numeric water quality objective of 0.025 micrograms per liter ($\mu\text{g/L}$) calculated as a four-day average, which is an objective that is applicable to those portions of the San Francisco Bay that are north of the Dumbarton Bridge. The State Water Board finds that the numeric water quality objective is redundant with the existing narrative bioaccumulation objective, in that the purpose of the numeric water column objective was to prevent bioaccumulation in fish tissue.
11. The State Water Board is in the process of developing a statewide numerical fish-tissue objective for mercury.

12. The State Water Board finds that a significant portion of the abandoned mines and mining areas contaminated by mercury in the State of California are situated on federal lands, and therefore the federal government is responsible for remediating these areas to attain water quality standards. The USEPA should actively use its Superfund and other authorities to promptly initiate such investigation and remediation, and cause the other relevant federal agencies to assume their responsibilities for cleaning up their lands.
13. Consistent with finding 12, above, the State Water Board finds that neither the CWA nor the CWC should be used as a means to leverage existing point source discharges as a means of forcing dischargers to bear more than their fair share of responsibility for causing or contributing to any violation of water quality standards. In this context “fair share” shall refer to the dischargers’ proportional contribution to the impairment.
14. A Basin Plan amendment does not become effective until approved by State Water Board and until the regulatory provisions are approved by OAL. Additionally, the TMDL must be approved by USEPA.

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Remands the amendment to the Basin Plan to incorporate a TMDL for mercury in San Francisco Bay adopted under San Francisco Bay Water Board Resolution No. R2-2004-0082 as corrected by the Executive Officer (Attachment 2) for further consideration consistent with this resolution.
2. Directs the San Francisco Bay Water Board to evaluate effective pollution prevention practices used in other states and the pollution prevention or other appropriate programs of each San Francisco Bay discharger, and their potential effectiveness in reducing mercury in their discharges. The San Francisco Bay Water Board shall revise the TMDL to incorporate requirements for appropriate programs and practices into the TMDL, and require all dischargers to aggressively implement appropriate pollution avoidance practices that are most effective at eliminating or reducing mercury concentrations in their effluent.
3. Directs the San Francisco Bay Water Board to evaluate and consider the effectiveness of any existing wastewater treatment technology that enhances the removal of mercury. The San Francisco Bay Water Board shall revise the TMDL to establish individual wasteload allocations, after reconsidering the appropriateness of the policy assumptions used by the Regional Water Board to derive the original wasteload allocations. In establishing such wasteload allocations, the San Francisco Bay Water Board shall incorporate provisions that acknowledge the efforts of those point sources whose effluent quality demonstrates good performance, and require improvement by other dischargers.
4. In carrying out the requirements of this resolution, the Regional Water Board shall comply with the requirements of CWC section 13360 regarding specifying the manner of compliance with Regional Water Board orders.

5. Directs the San Francisco Bay Water Board to revise the TMDL to require inclusion in the next round of NPDES permits or in the watershed NPDES permits monitoring for, and determination of the relative proportion of, methylmercury in effluent discharges.
6. Directs the San Francisco Bay Water Board to ensure that in-Bay disposal of dredged material containing mercury complies with the requirements of the Long Term Management Strategy Plan (LTMS).
7. Directs the San Francisco Bay and Central Valley Water Boards to create a watershed legacy mercury inventory and establish a priority list for addressing these sources. The Water Boards shall also propose potential methods or strategies to remediate priority sources.
8. Directs State Water Board staff to develop a State policy for water quality control that establishes alternative methods to allow dischargers to meet mercury effluent limitations that are directed to preventing contributions to excursions above water quality standards. The policy shall allow dischargers to perform other activities aside from eliminating more mercury from their discharges than they would be required to remove by applicable technology-based effluent limitations. This policy shall require more rigorous activities for: (a) dischargers not in compliance with their wasteload allocations and/or other applicable criteria or objectives; and (b) dischargers seeking to increase their mercury load. The policy shall include provisions that recognize the efforts of those dischargers who are meeting or outperforming their wasteload allocations, and that recognize the expenditures made by dischargers who are employing higher treatment levels. The policy shall not include requirements that would leverage existing point source discharges as a means of forcing dischargers to bear more than their fair share of responsibility for causing or contributing to any violation of water quality standards. In this context “fair share” shall refer to the dischargers’ proportional contribution to the impairment. The policy shall also include provisions that prevent localized disparate impacts.
9. The San Francisco Bay Water Board shall include requirements in the TMDL that any new or modified NPDES permit for dischargers shall contain a reopener to implement Resolved No. 7, above.
10. Directs the San Francisco Bay and Central Valley Water Boards to investigate ways, consistent with their regulatory authority, to address public health impacts of mercury in San Francisco Bay/Delta fish, including activities that reduce actual and potential exposure of and mitigate health impacts to those people and communities most likely to be affected by mercury in San Francisco Bay-Delta caught fish, such as subsistence fishers and their families.
11. Directs the San Francisco Bay Water Board to either develop an appropriate and allocable numerical target that is protective of wildlife, or clarify that the existing bird-egg target is a monitoring target, and that the TMDL will be revised if results of such monitoring reveal that the beneficial uses are not being protected.
12. Directs the San Francisco Bay Water Board to revise, withdraw, or take other appropriate action to address the marine waters mercury four-day average water quality objective. In so doing the Regional Water Board shall comply the provisions of Clean Water Act section 303,

including but not limited to subparagraph (c)(2)(B), which require the adoption of numerical criteria for toxic pollutants.

13. Directs the San Francisco Bay Water Board to bring a revised TMDL, consistent with this resolution, back to the State Water Board within nine months of the date of this resolution. The San Francisco Bay Water Board shall report its progress in complying with this resolution to the State Water Board within six months of the date of this resolution.

BE IT FURTHER RESOLVED THAT:

The State Water Board:

14. Shall dedicate funds to the Regional Water Board(s) to assist in compliance with this resolution, including for contracting with the United States Geological Survey or other appropriate agencies, to examine the mines and areas impacted by mining from a water quality perspective.
15. Shall commence efforts to coordinate with the Air Resources Board and other relevant agencies to address air deposition of mercury to areas that could affect the quality of Waters of the State.
16. Shall, pursuant to their offers, convene a meeting with the USEPA, Western States Petroleum Association, the Bay Area Clean Water Agencies, and with the San Francisco Bay and Central Valley Water Boards and other interested stakeholders, to investigate methods of addressing and financing the redress of mercury from the mining legacy.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on September 7, 2005.

AYE: Arthur G. Baggett
Richard Katz
Gerald D. Secundy
Tam M. Doduc

NO: Peter S. Silva

ABSENT: None.

ABSTAIN: None.


Debbie Irvin
Clerk to the Board