



Central Valley Regional Water Quality Control Board

11 July 2024

To whom it may concern:

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) identified the Sacramento-San Joaquin Delta Estuary (Delta) as impaired for mercury in 1990 because elevated mercury levels in fish posed a health risk for human and wildlife consumers. In 2000, the United States Environmental Protection Agency (USEPA) promulgated a water quality criterion for total mercury of 50 nanograms per liter (ng/L) to protect human health and the environment. In 2006, the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay Water Board) identified Central Valley outflows from the Delta as one of the primary sources of total mercury to San Francisco Bay and assigned the Central Valley a load reduction of 110 kilograms per year (kg/yr).

To address the methylmercury impairment in the Delta, the Central Valley Water Board established a total maximum daily load (TMDL) for methylmercury and an associated implementation plan, collectively referred to as the Delta Mercury Control Program (DMCP). The DMCP was designed to protect human and wildlife health in the Delta and meet the Central Valley's total mercury load allocation from the San Francisco Bay Water Board. The DMCP was adopted by the Central Valley Water Board on 22 April 2010 as an amendment to the Central Valley Region Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. The TMDL was approved by USEPA on 20 April 2011.

When the Central Valley Water Board adopted the DMCP in 2010, additional studies were still needed to better characterize in-Delta methylmercury sources and to explore the extent to which methylmercury production could be mitigated. The DMCP is therefore implemented through a phased, adaptive management approach where Phase 1 required entities discharging methylmercury in the Delta to conduct source control studies and to develop and evaluate methylmercury management methods. The DMCP required the studies to be reviewed by an independent scientific peer review panel, which was coordinated through the Delta Stewardship Council's Delta Science Program.

Phase 1 of the DMCP also required a program review, referred to as the DMCP Review, that would incorporate information learned during Phase 1 that could inform potential changes to the DMCP. Phase 2 began on October 20, 2022, and requires dischargers

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to implement methylmercury control programs to meet allocations, continue total mercury reduction programs, and conduct compliance monitoring.

The Staff Report for Scientific Peer Review (Technical Review Report or Report) presents Central Valley Water Board staff's technical review of certain aspects of the Phase 1 DMCP. The report contains reevaluations of water quality objectives (WQO), sources, and allocations to address the mercury impairment in the Delta in light of comprehensive water quality studies and data that were collected as part of Phase 1. The Report is a technical review of the current program and presents potential refinements to the current DMCP approach based on new data.

The Technical Review Report is a first step in completing the Basin Plan's required reevaluation of the Phase 1 DMCP. Peer review of the new data and scientific conclusions will help establish a baseline that program alternatives may be compared against. Therefore, Board staff are releasing the Report for external scientific peer review and simultaneously releasing the report publicly. Findings in the Report may be used to identify potential modifications of the DMCP, including modifications to: methylmercury goals, site-specific WQOs, load and waste load allocations, requirements and schedules for implementing methylmercury management practices, final compliance date(s), and the creation of a mercury offset program.

The studies conducted during Phase 1 affirm that regulated sources of mercury within the Delta, including wastewater plants, irrigated agriculture, and stormwater, are not the most significant drivers of methylmercury impairments in the Delta. In contrast, methylmercury inputs from tributary watersheds and open water sediment flux are described in the Report as comprising an even larger proportional share of methylmercury loading to the Delta than was previously estimated. These conclusions in the Report may inform proposals to adjust waste load allocations or develop offset programs to address water quality impairments in the Delta more efficiently.

Central Valley Water Board staff are committed to working with Tribes, permittees, local/State government, USEPA, NGOs, communities, and others to inform potential DMCP modification options for the Board's consideration. The next steps will be to hold public meetings to identify alternative actions and modifications to the DMCP and to provide opportunities for direct engagement with the Central Valley Water Board.

If you have any questions or concerns, please contact Meredith Howard, Environmental Program Manager of the Planning Section, at Meredith.howard@waterboards.ca.gov.

Sincerely,

Patrick Pulupa
Executive Officer