



March 30, 2012

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Transmitted via email to: commentletters@waterboards.ca.gov.



Re: Comments on the proposed Statewide Mercury Control Policy and a Mercury Control Program for Reservoirs

Dear Ms. Townsend,

On behalf of Clean Water Action (CWA) and its 85,000 California members, I wish to thank you for this opportunity to provide the State Water Resources Control Board (State Board) with the following comments and inquiries regarding the Statewide Mercury Policy and Mercury Control Program for Reservoirs (Control Program).

CWA is a non-profit organization of diverse people and groups joined together to protect our environment, health, economic well-being and community quality of life. Our goals include clean, safe and affordable water; prevention of health threatening pollution; creation of environmentally safe jobs and businesses; and empowerment of people to make democracy work. Our California program has a strong focus on mercury pollution in the State's waters and the effects on fishing communities, particularly low income communities and communities of color with high levels of locally caught fish consumption out of economic need or cultural tradition.

Purpose and need for the project(s)

Mercury is a particularly thorny problem given not only its serious threat to human health and wildlife, but because its variability related to local physical conditions. CWA has been involved in a number of individual mercury and methylmercury TMDL projects over the years, including San Francisco Bay, the San Joaquin Delta, and the Guadalupe River. These processes took numerous years and significant resources to develop. Furthermore, their success in adequately addressing the contamination is uncertain given the complexities of mercury and the resulting decades-long implementation timelines. It is our strong belief, therefore, that the State and Regional Boards should seek to identify additional, more efficient and effective strategies to address the grave impacts of mercury in our waters from both legacy and contemporary sources. This includes creating programs to control methylation in order to protect wildlife and humans fishing in mercury laden waters and identifying environments with similar features for which parallel "best practices" or remediation/control strategies can be implemented on a state-wide level.

In principle, CWA supports a state mercury policy that provides a structure by which to identify and implement such opportunities. However, we are troubled by the stated goal of a statewide mercury policy as “providing the framework for implementing a consistent approach to controlling mercury in California’s inland waters” (not just reservoirs). Our concern with the limited description of such a policy in the Board’s *Summary for CEQA Scoping Meetings* stems from the nature of mercury itself, which is changeable depending on the hydrologic, temperature, and other conditions in the watershed. It is unclear how will such a general policy, despite its laudable intent to expedite mercury control and propagate efficiency, deal with the fact that mercury is so variable, as are the beneficial uses and physical attributes of various water bodies. The ultimate reality is that “one size fits all” won’t work with mercury. As CEQA analysis proceeds, this variability must be considered in order to produce a policy and strategies that will balance consistency with the specific needs of our watersheds. Otherwise the State risks establishing practices that may not optimize the most effective reduction strategies for specific regions of the state, with potentially deleterious impacts on local wildlife and human fishing populations.

CWA does see addressing mercury contamination as described in Alternative 2 of the Reservoir Mercury Control Program as the type of opportunity that the Boards should advance as part of an overall mercury policy and implementation strategy. We base this view on the potential similarities in appropriate actions to reduce both inorganic and methylmercury within similar environments. However, as some of our comments below will indicate, any analysis on how to move such a program forward will have to include a basic understanding of the variations in reservoir environments (based on size, temperature, etc.). Implementation actions will have to be flexible to account for these differences and to enhance, rather than delay or interfere with other mercury remediation programs.

Project Description

It seems clear that the two elements of this program are being analyzed at different levels. The Statewide Mercury Policy, which is barely described, cannot be analyzed at a project level, while the Reservoir Mercury Control Program does describe clear alternatives. The document must distinguish the programmatic and project level components. CWA recommends that this document be limited to the Reservoir Mercury Control Program.

The project description for the Statewide Mercury Policy is deficient in that it fails to fully describe its components. The scoping meeting outlined three components to the policy, only one of which is included in the project description, namely the Reservoir Mercury Control Program. The other two components, establishing a mercury fish tissue objective and a statewide tribal fish consumption study, must be part of the project description if the policy is to be adequately analyzed. Consequently, except when specifically noted, the comments below refer to the reservoir program.

Impacts on other necessary projects

It was stated during the staff presentation on the reservoir mercury control program that this effort would not interfere with other cleanup programs, such as tributary TMDLs. However, it is our understanding that in fact a mercury TMDL for the American River was postponed in order to focus on developing the statewide mercury policy and reservoir control program. Given limits on water board resources and staff, it remains unclear how this project will impact movement on TMDLs or other cleanup activities for non-reservoir waters, including those watersheds that include reservoirs – all of which will have an environmental impact and should be discussed in a CEQA analysis. Specifically questions to be addressed are:

- How will the mercury policy and reservoir control plan effect future TMDL development? What is the timeline for upstream TMDL projects?
- How will the reservoir process impact TMDL implementation already under way, such as the stakeholder and control projects implemented as a result of the Delta MeHg TMDL?
- How will reservoir projects be incorporated into new TMDLs for watersheds in which they are situated?
- How can reservoir mercury control projects influence both the amount of mercury moving downstream and the form of mercury? What happens to elemental mercury that is prevented from methylating in a reservoir when it leaves that reservoir?

The project description is also deficient in explaining a number of specific points:

- It is unclear whether there will be sampling/monitoring below the dams. This should be a requirement in order to establish the links between what is going on upstream with what is happening downstream.
- How will the Board access the best reservoir science? One of the goals of this analysis should be to enable it to prioritize appropriate pilot programs and to generate more science on mercury control and cleanup?
- How will the environmental benefits of the implementation actions be measured and evaluated, as well as potential adaptations to the control program as a result of those measurements?

Alternatives: Implementation

Given the scope of the mercury problem in California and the serious threats it poses to human health and wildlife, CWA advocates that mercury and methylmercury reductions be as rigorous as possible based on actual uses of the water, the awareness that an impaired waterbody has *no* assimilative capacity for further mercury loading, and on a precautionary principle that prioritizes environmental health protections and considers costs to society over those to dischargers. We therefore look for comprehensive strategies that require reductions/controls from *all* mercury sources and receiving areas conducive to methylation, no matter the size of their loadings or percentage of the problem they represent.

The range of control strategies presented is very good. CEQA analysis should focus on how to prioritize them, how to determine which may be universally effective for reservoirs around the state, and which are best for individual reservoirs. Specific questions that arose from our

reading of the draft informational document and list of implementation actions include the following:

- A TMDL refers to the amount of mercury a reservoir can take and still meet beneficial uses. How will the control program take differences in size, temperature, other physical attributes, as well as geographical differences in local wildlife populations and human fishing practices into account?
- What is meant by total recoverable mercury criteria, or the degree to which some Regional Water Boards' mercury objectives are more stringent than the CTR criteria?
- Regarding the actions related to mine sites, how will the Board overcome conflicts as to who is responsible that have stymied progress to date. It is important to note that in State Board Resolution 2009-0060 the Board committed to "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" (Resolved #14 related to Region 2 and Region 5). The State Board further committed to "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" (Resolved #16). It is unclear as to whether the first commitment was honored and we do not believe the second was. Can this commitment be resurrected as a means of moving this program forward, as well as a way of advancing other waterbody specific remediation plans or TMDLs?
- It is unclear what is meant by "manage nutrients/algae to improve production (at the base of the food web) and reduce fish methylmercury concentrations." Production of what? Isn't it through algae and other nutrients that methylmercury enters the food web?
- Regarding upland earthmoving projects and in-stream projects, can the Board go beyond encouraging/promoting landscaping practices that contain erosion and actually require them?
- Regarding upland earthmoving projects and in-stream projects, we are confused by the suggestion of constructing wetlands. While not all wetlands increase methylation, some do. Consequently, it is not clear what environmental impact construction of wetlands will have. We also note that the description of Element 1-Alternative 2 of the statewide mercury policy does not consider impacts of wetlands and wetlands restoration projects. This document must analyze the impact of upstream wetlands on all downstream waters, including reservoirs.
- The draft informational document states that "the proposed policy may also include implementation procedures" related to the NPDES permitting process. One of the key deficiencies in TMDL and other remediation processes is the lack of clarity related to non-point source pollution and ensuring that such loadings are controlled. How will this policy address non-point source pollution related to mercury both in relation to the reservoirs and the mercury policy as a whole?
- The Implementation Procedures section indicates that if a point source discharger cannot reach mercury effluent limitations, a variance procedure could provide regulatory relief. How will the Board ensure that compliance will not simply be based on actions, but will

ensure that we in fact realize the mercury effluent limitations that are necessary to reach water quality objectives?

Finally, CWA strongly urges the Board to integrate its efforts with other efforts by sister agencies to reduce mercury entering the environment. For example, we recommend working with the Department of Toxic Substances Control (DTSC) to ensure that their mercury containing thermostat regulations are robust as a means of lowering urban stormwater loads? DTSC should also be encouraged to regulate dentists by requiring amalgam separators through its P2 program and to prioritize mercury in consumer products through the Green Chemistry Initiative.

Fisheries Management

While managing the types of fish in a reservoir can have a positive effect in reducing the amount of mercury traveling through the food web, and is thus justifiably included as an implementation alternative, it deserves special attention given the particular need to make this strategy clear to the public. For instance, the implementation section is unclear about how enhancing the individual fish growth rates of highly contaminated fish will reduce their methylmercury levels mean.

Perhaps more importantly is ensuring that anglers clearly understand that the reason the Board may encourage “intensive fishing of species with higher mercury levels” is to replace them with species that are safer to consume. This will require robust, culturally appropriate public outreach and education, including public media campaigns targeted at diverse communities. This will be necessary to ensure that anglers understand that potentially higher catch rates of fish with higher mercury levels do not mean that it is safe to consume higher quantities of said species. Strategies, such as fish swaps, would also help ensure that anglers will be willing to give up their catch of more contaminated species, while still being able to consume healthy, nutritious fish.

We are pleased to learn that such species “replacement” would be done in a way that ensures that the alternative fish are in fact native to the region and ecosystems in which they are being introduced or re-introduced. It will also be imperative to ensure that the fish being replaced are not integral to the native environment or have cultural significance to local tribes.

Impacts

One of the major problems that impacted communities have experienced with currently approved mercury TMDLs is that the fish tissue targets, while acceptable under USEPA’s recommended fish tissue criterion for methylmercury and sports fishing, will not protect subsistence fishers who consume unsafe levels of fish out of economic need or cultural tradition. We are pleased, therefore, by the Board’s stated awareness of the need to consider subsistence fishing levels and tribal practices in establishing goals for both the overall mercury policy and reservoir control program.

Despite this stated commitment, it is unclear how the Board will analyze actual fish consumption practices and how it will make decisions related to fish tissue and water quality targets. A number of issues could influence these decisions and should be part of a CEQA analysis since, in addition to the effects on human populations, will impact wildlife and the environment in general. These include, for example, a lack of data on fish consumption rates, the fact that subsistence fishing (FISH) and tribal cultural uses (CUL) are not recognized as official beneficial uses at the state level, and that fact that both the USEPA's recommended fish tissue criterion and currently approved mercury TMDLs in California have established precedents of fish tissue targets.

Lack of data

In most TMDL processes, extensive resources have been expended on the physical attributes of the water body and contaminant(s) in question, but not on local fishing and fish consumption practices. Consequently, there is inadequate information around the State about the impacts contaminants such as mercury are having on local populations. While we applaud the implementation of a statewide tribal fish consumption study, this research will not be completed in time to influence decisions related to the overall mercury policy, goals for the reservoir control program, or the related fish tissue objectives project. Nor will it provide data on non-tribal communities with high consumption rates of locally caught fish.

The central question, therefore, is how will the Board determine the appropriate fish tissue target given the dearth of data on subsistence fishing levels, including in the wide array of ethnic and low income communities in the impacted regions? At minimum, the CEQA analysis must include collection and study of the limited research that has been done on fish consumption and consultation with representatives from impacted communities to gather some basic initial information on which to base initial decisions. Furthermore, the Board should undertake further study of who is fishing at and downstream of the state's reservoirs. Finally, as discussed under the heading of public participation below, local advisory committees included representatives from impacted communities should be part of decisions made regarding specific control strategies and goals for local reservoirs.

Impacts of previous decisions

One criticism CWA has of the draft informational document regarding the reservoir control plan is the description of the USEPA's recommended fish tissue criterion and how it is derived. While we recognize that the Board is required to accurately represent EPA's recommendations, much of this section is likely to be unclear to non-technically oriented readers, including those most impacted by mercury. A reader friendly explanation of that information is needed. However, the bottom line is that defaulting to previously adopted mercury TMDL targets or relying on is USEPA's recommended fish tissue criterion will not fulfill the Board's responsibility or commitment to protect subsistence fishing communities and cultural practices impacted by mercury. CWA is opposed to a default to the typical 1 meal a week fish tissue target that has been promulgated in the Delta, SF Bay, and other TMDLs or will it truly consider subsistence and cultural beneficial uses? Instead targets must be based on current and growing understanding of actual fish consumption levels.

A related question that did arise regarding the statewide mercury policy is would such a policy, with specific requirements for point and nonpoint sources and statewide fish tissue objectives lead to averaging, so that we don't necessarily reduce mercury to optimum levels per water body/watershed or protect all fishing communities, such as subsistence fishers and tribes.

Process

CWA is particularly interested in how the Board will continue to ensure that tribes, other impacted communities, and the environmental community will have input on the information gathering, analysis, and decision making as both the Statewide Mercury Policy and reservoir control plan moves forward as well as how that input will be weighted vs. other sources of data and opinion. As indicated earlier, we are also interested in hearing how the Board will balance development of statewide policies and actions with the regional or local needs of the various reservoirs or other waterbodies contaminated by mercury. We strongly recommend that in addition to a state level advisory group, that is appropriately balanced with those representing tribes and other public interests (vs. a process that is dominated by reservoir managers, dischargers, and other agency personnel), that local advisory committees be established for each impacted reservoir to identify the best implementation options and to monitor progress in reducing mercury and methylmercury loads. We also look to see a program that will ensure data sharing as pilots and other strategies are implemented.

CWA applauds the Board for its plans to seek new, innovative, efficient ways to implement practical solutions to California's mercury problem. We hope that these questions and comments will help strengthen the programs and look forward to working with the Board to ensuring that we expedite meaningful mercury reductions to the optimal level possible in a timely fashion

Sincerely,



Andria Ventura
Toxics Program Manager