From: Diane Fleck <Fleck.Diane@epamail.epa.gov>
To: Carrie Austin <CAustin@waterboards.ca.gov>

**Date:** 4/10/2012 4:02 PM

**Subject:** Comment Letter: Tentative Resolution for Tomales Bay Mercury TMDL

Via E-Mail

Carrie Austin San Francisco Bay Regional Water Quality Control Board 1515 Clay Street, Suite 1400 Oakland, CA 94612

Dear Ms. Austin:

Thank you for the opportunity to comment on the Tentative Resolution for a Total Maximum Daily Load (TMDL) and Implementation Plan for Mercury in Tomales Bay. EPA supports your proposed action to adopt a TMDL for mercury in Tomales Bay by Resolution, rather than by Basin Plan Amendment. Your analysis indicates that previous actions to cleanup the Gambonini Mine site, and on-going actions to implement the Walker Creek Watershed Mercury TMDL and the Tomales Bay Pathogens TMDL, are sufficient to implement an appropriate TMDL for mercury in Tomales Bay. We appreciate these efficiencies, and commend the Board. Below are our comments on the Tentative Resolution and associated Staff Report.

In order for EPA to approve a mercury TMDL for Tomales Bay, the Tentative Resolution must contain the elements of the TMDL, or reference a document that contains the elements. The Total Maximum Daily Load (TMDL) for Mercury in Tomales Bay Staff Report, dated March 12, 2012, contains and describes the elements in detail. The elements include a discussion and analysis of: all applicable water quality standards; the numeric targets necessary to achieve the water quality standards; a quantitative source assessment; a linkage analysis and the loading capacity of the water body; the total maximum daily load to the water body; the load allocations and wasteload allocations for all sources, as applicable; a margin of safety; seasonal variation and critical conditions; and public participation. Please reference the Staff Report as the underlying document for Attachment A, Summary of Tomales Bay Mercury TMDL, of the Tentative Resolution.

The numeric target to protect human health, described in both the Tentative Resolution and in the Staff Report, is 0.2 mg of methylmercury per kg of fish tissue (fillet, wet weight) in legal size halibut. Please include a description of the legal size of halibut, such as a range of fish length. This will clarify the numeric target.

The linkage analysis, which describes the relationship between numeric targets and sources, in the Tentative Resolution and in the Staff Report, states that there is a "one-to-one relationship between changes in methylmercury levels in prey fish and changes in surface sediment total mercury concentrations." Please explain more specifically what is meant; our understanding is that if surface sediment concentrations are reduced 50%, then fish methylmercury levels will be

reduced by the same percentage. Please include an explanation of the basis for this assumption.

TMDLs are expressed in terms of mass loads per day (daily time steps). The TMDL for Tomales Bay is expressed in terms of an annual load, 0.2 mg mercury per kg of suspended sediment (bay-wide, dry weight, annual average). Please include an explanation as to why it is reasonable and appropriate to express the TMDL in annual terms, rather than in daily time steps.

The TMDL for Tomales Bay is 0.2 mg mercury per kg of suspended sediment (annual average), while the allocations appear to add up to a higher concentration: allocations range from 0.2 mg/kg suspended sediment from Lagunitas Creek and other tributaries, to 0.5 mg/kg suspended sediment from Walker Creek, and the air deposition allocation is 0.7 kg mercury per year. The Staff Report indicates the TMDL will be achieved because the sediment from Walker Creek is only 3.4 % of the Bay (Figure7-1). Please include more detail explaining how the TMDL will be met with the proposed allocations.

For completeness, we suggest including more detail in Attachment A in the following areas: Water Quality Standards: include all applicable water quality standards (including beneficial uses and numeric and/or narrative criteria or objectives); Source Analysis: include a brief description of all sources, including magnitude and location, if possible; Linkage Analysis: include a brief explanation as to what is meant by a "one-to-one relationship" discussed above, and how the loading capacity of 0.2 mg/kg suspended sediment was determined; and TMDL and Allocations: include a brief explanation of why it is reasonable and appropriate to express loads in terms of annual loads, and how the TMDL of 0.2 mg/kg of suspended sediment will be met with the proposed allocations.

The positions described in this letter are preliminary in nature and do not constitute a determination by EPA under Clean Water Act section 303(d). EPA will make appropriate approval/disapproval decisions following adoption of the TMDL, and the State Water Resources Control Board's submittal to EPA.

We appreciate the great deal of work that has gone into the development of the draft TMDL, and we appreciate the opportunity to review and comment. If you have any questions, please contact me at the e-mail or phone numbers below.

Sincerely,

Diane E. Fleck, P.E., Esq. U.S. EPA Region 9 WTR-2 75 Hawthorne Street San Francisco, CA 94105

Phone: 415 972-3480 Tues (or to leave a message)

Phone: 408 243-9835 Mon/Wed/Thurs

Fax: 415 947-3537

## Water Board staff note:

Subsequent to U.S. EPA's receipt of our draft responses to comments, U. S. EPA staff sent the following support letter via e-mail.

From: Diane Fleck <Fleck.Diane@epamail.epa.gov>
To: Carrie Austin <CAustin@waterboards.ca.gov>

CC: Janet Hashimoto < Hashimoto. Janet@epamail.epa.gov>

Date: 4/17/2012 10:28 AM

Subject: Support Letter for Tomales Bay Hg TMDL

Attachments: [draft Responses to Comments]

## Hi Carrie,

Thank you for the draft copy of your Responses to Comments document. The draft document addresses our concerns in our comment letter of April 12, 2012.

We are pleased to support the Tentative Resolution for a Total Maximum Daily Load (TMDL) and Implementation Plan for Mercury in Tomales Bay, and we urge the Regional Board's adoption of the package.

Thank you again for the opportunity to review the package and the draft Responses to Comments document.

Sincerely,

Diane

Diane E. Fleck, P.E., Esq. U.S. EPA Region 9 WTR 2 75 Hawthorne Street San Francisco, CA 94105

Phone: 415 972 3480 Mondays/Tuesdays Phone: 408 243 9835 Wednesdays/Thursdays

Fax: 415 947 3537