



February 17, 2017

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-2000

Public Comment
Beneficial Uses and Mercury Objectives
Deadline: 2/17/17 12 noon

Delivered electronically: commentletters@waterboards.ca.gov

Subject: Comment Letter -- Beneficial Uses and Mercury Objectives



Dear Ms. Townsend:

The County of Orange, as Principal Permittee of the Orange County Stormwater Program, and the Orange County Flood Control District (collectively, "County") appreciate the opportunity to provide comments on *Proposed Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California - Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions*, which was distributed for public review on January 4, 2017 (referred to hereinafter as the "Draft Beneficial Uses and Mercury Objectives"). The County, along with co-permittee cities named herein-below, hereby joins in the comments submitted by the California Stormwater Quality Association (CASQA), and incorporates those comments by reference as though fully set forth herein. The County provides the following comments, which the co-permittee cities of Aliso Viejo, Dana Point, Irvine, La Palma, and Mission Viejo have directed that they be recognized as concurring entities.

The State Water Resources Control Board (State Water Board) proposes to establish (a) three beneficial use definitions pertaining to tribal traditional and cultural use, tribal subsistence fishing use, and subsistence fishing use; (b) one narrative and four numeric mercury water quality objectives to protect numerous beneficial uses of water involving human health and aquatic dependent wildlife; and (c) a program of implementation to control mercury discharges. In addition, the State Water Board is proposing to align the adoption of these items with the timeline stipulated within the U.S. EPA Consent Decree¹ so that U.S. EPA's obligation to establish mercury water quality criteria for aquatic life and aquatic-dependent wildlife would be satisfied.

We provide comments herein to address issues of particular concern for the municipal stormwater programs in Orange County, which focus on the process and timeline for the adoption of the Draft Beneficial Uses and Mercury Objectives, the proposed beneficial use designations, and the program of implementation for municipal stormwater dischargers.

¹ *Our Children's Earth Foundation and Ecological Rights Foundation vs. U.S. EPA*, No. 3:13-cv-2857-JSW (2014)

- **The State Water Board should extend the timeline for the adoption of the proposed beneficial uses, water quality objectives, and program of implementation.**

The County understands that the State Water Board intends to adopt the Beneficial Use definitions and Mercury Objectives prior to June 30, 2017 to, in part, assist U.S. EPA in complying with a Consent Decree. While we support the State Water Board's effort to promulgate such water quality objectives for California, attempting to meet the U.S. EPA driven June 30, 2017 deadline will prevent a robust, informed public review and feedback process for this rulemaking, some of which we saw for the first time on January 4.

Considering the broad scope of the action proposed and the voluminous nature of the material (over 700 pages of information and technical analyses), including the adoption of multiple mercury numeric and narrative water quality objectives, the creation of new beneficial uses, the interplay with in-stream flow requirements (which was the subject of a February 1 workshop), and the actions within the implementation plan, the County requests either:

- An extension of time be sought under the U.S. EPA Consent Decree and additional steps added to the public process for this rulemaking²; or
- Bifurcate the U.S. EPA obligation to develop water quality criteria for wildlife (the proposed prey fish and California least tern prey fish objectives) by June 30, 2017, from the remaining portion of the proposal and add additional time and steps to the public process for the remaining portions of this rulemaking.

Either option would still allow the State Water Board to adopt objectives consistent with the terms of the Consent Decree while allowing appropriate time and consideration for the development of water quality objectives, beneficial use definitions, and a program of implementation that are not part of the terms of U.S. EPA's Consent Decree.

The County therefore requests:

Pursue one of the options above and revise the schedule as follows:

- Extend the public comment period by 60 additional days to about mid-April 2017;
 - Postpone the State Water Board's first hearing on this issue until May 2017;
 - Provide additional opportunity for the submission of written public comments on any revisions; and
 - Hold the final hearing for consideration of adoption in the Fall of 2017.
- **The State Water Board should provide guidance or direction for the designation of the newly proposed beneficial uses.**

Beneficial uses are the underpinning of water quality based regulations and drive permit provisions, enforcement actions, and many other decisions of the Regional Water Boards as well as the State Water Board. Once established and applied to a specific waterbody,

² Original letter sent to State Water Resources Control Board January 25, 2017; *Comment Letter – Beneficial Uses and Mercury Objectives: Request for Extension of Time.*

corresponding discharge permits must include provisions that ensure that such uses are protected and maintained.

The associated numeric and narrative water quality objectives could become receiving water limitations and/or total maximum daily wasteload allocations within the permits that, in the case of mercury, may be extremely difficult to meet because the stormwater permittees have little control over the primary source(s), including geological background and atmospheric deposition. The County recognizes that it is important to protect and maintain water quality for the range of designated beneficial uses assigned to a particular water body. Unfortunately, the history of beneficial use designations in California has, at times, resulted in the application of impractical beneficial uses for some of the waterbodies, which has then resulted in the inappropriate application of receiving water limitations and/or TMDL wasteload allocations. To avoid such unintended consequences, it is imperative that there be clear direction/ guidance regarding what types of waterbodies are appropriate for designation of the proposed uses, and the nature and quality of information necessary for a water body to be designed under the newly proposed beneficial uses.

However, the Draft Beneficial Uses and Mercury Objectives does not provide guidance or direction to the Regional Water Boards as to how and when the proposed uses should be designated. The Draft Staff Report does not discuss considerations of seasonality, realistic expectations for attainment of the uses, and other uses of the water. Porter-Cologne mandates that Regional Water Boards and the State Water Board regulate water quality to ensure the reasonable protection of beneficial uses and the prevention of nuisance, considering all the demands made on the water (Water Code § 13000, 13241). Accordingly, it is important that both the proposed Inland Surface Waters Plan (ISWP) language and the Draft Staff Report instruct the Regional Water Boards to consider multiple factors, as well as the minimum data and informational requirements that need to be considered prior to designating these beneficial uses to waterbodies within their regions.

The County requests:

Revise the ISWP language and the Draft Staff Report to provide guidance/direction regarding the various factors, including corresponding data and information that the Regional Water Boards and the State Water Board need to consider prior to designating a waterbody with any of the newly proposed beneficial use definitions.

- **The Draft Staff Report fails to identify the need for Use Attainability Analysis prior to designation by Regional Water Boards, or provide Regional Water Boards with direction for application of the newly proposed beneficial uses.**

Federal regulations require a state to conduct a use attainability analysis as described in 40 C.F.R., 131.10(g) when a state designates uses that do not include the uses specified in section 101(a)(2) of the Clean Water Act (CWA). The uses in section 101(a)(2) are for the protection and propagation of fish, shellfish and wildlife, and provide for recreation in and on the waters. These uses are often referred to as the fishable-swimmable uses. As

described in the Draft Staff Report, the proposed beneficial uses are not fishable-swimmable uses, and thus any designation of such uses must only occur after the Regional Water Board has conducted a use attainability analysis pursuant to 40 C.F.R., 131.10(g). In other words, before designating these uses, the Regional Water Boards and/or the State Water Board should ensure that the uses are in fact attainable, considering the factors specified in 131.10(g).

Requiring a use attainability analysis prior to use designation, which is required by federal regulations, is in direct contrast to the direction provided by the Draft Staff Report. The Draft Staff Report states that “there is no required or threshold of use that the Water Boards must consider when determining beneficial use designations.” (Draft Staff Report, p. 111.) Moreover, the Draft Staff Report claims as follows “..., beneficial uses may be designated as a goal use (or probable future use in Porter-Cologne parlance) where neither the water quality is currently being attained or the use is actually occurring, but there is evidence to indicate that the use would be a probable future use.” (Draft Staff Report, p. 112.) Not only do these statements conflict with federal regulatory requirements in 40 C.F.R. 131.10(g), but they also provide Regional Water Boards with inappropriate direction to adopt beneficial uses that may not actually exist, or be attainable.

The County requests:

The Draft Staff Report should be revised to reflect applicable federal regulatory requirements with respect to the designation of the newly proposed beneficial uses and incorporate this requirement within the guidance mentioned above.

- **The Draft Staff Report does not adequately consider the California Water Code §13241 factors as they relate to attainability of the water quality objectives.**

Consistent with California Water Code (Water Code) §13241, when setting the mercury objectives, the State Water Board must consider a number of factors, including the “(c) water quality conditions that *could be reasonably attained* through coordinated control of all factors affecting water quality.” [Emphasis added].

Thus, the Draft Staff Report should, at a minimum, identify the requisite program of implementation necessary for achieving the proposed objectives and impacts of the program on factors listed in Water Code Section §13241 so that there is some assurance that the proposed objectives can be reasonably attained.

The Draft Staff Report identifies that the “principal sources of mercury pollution to the waters within California are historic mines and atmospheric deposition³” and that “mercury is also present (but in smaller absolute amounts) in point-source discharges, due to a wide variety of potential industrial, commercial and residential sources.” It also notes that the majority of the established mercury total maximum daily loads (TMDLs)

³ Executive Summary, page xx

identify the major sources of mercury as historic mines/mining legacy, historic manufacturing/processing, and atmospheric deposition⁴.

The Draft Staff Report⁵ includes a brief analysis regarding the water quality conditions that could reasonably be achieved (Section 10.1.3). The Report then concludes “it may take a significant period of time to attain the objectives by implementing the mercury controls in the Provisions and developing and implementing other water quality control programs, such as TMDLs. Additionally, the Tribal Subsistence Fishing Water Quality Objective and the Subsistence Fishing Water Quality Objective may be very difficult to achieve in most waters as discussed in Section 6.5.”

However, the 13241 analysis does not, given the primary sources of mercury, assess what combination of controls and/or timeframe is necessary in order for the water quality conditions to be achieved, and if those conditions are even achievable in all cases, especially if some sources are not currently regulated by the Water Boards. For example, if there is a limited ability to control the primary sources (sediment associated with historic mines and atmospheric deposition) or there are areas where there are elevated levels of mercury in soils due to natural geology, it is unclear if the proposed objectives can be achieved, let alone reasonably attained.

The County requests:

The Draft Staff Report must be modified to identify a range of implementation actions (as proposed in Section 2.3.3, Section 7, and Appendix A) and discuss whether those actions would result in the proposed water quality objectives being reasonably attained, given factors such as sources of mercury. Based on the results of this 13241 analysis, the program of implementation should be evaluated to ensure that it is commensurate with the achievability of the objectives and the primary factors that drive that achievability.

- **The Draft Staff Report should fully consider the California Water Code §13242 as it relates to the implementation of the water quality objectives.**

Consistent with Water Code § 13242, when setting the mercury objectives, the State Water Board must consider “*the program of implementation for achieving water quality objectives*” which “shall include, but not be limited to [Emphasis added]:

- a. A description of the nature of actions *which are necessary to achieve the objectives*, including recommendations for appropriate action by any entity, public or private.
- b. A *time schedule* for the actions to be taken.
- c. A *description of surveillance* to be undertaken to determine compliance with objectives.”

⁴ Section 4.4.9 Sources of Mercury Identified in TMDLs

⁵ Section 10.1.3 - *Water Quality Conditions that Could Reasonably be Achieved through Coordinated Control of All Factors Affecting Water Quality*

Although the Draft Staff Report discusses the elements of a program of implementation required by Water Code § 13242⁶, it does not fully address subd. (a)-(c).

For the “description of the nature of actions *which are necessary to achieve the objectives*, including recommendations for appropriate action by any entity, public or private” the Draft Staff Report simply refers to the program of implementation within Appendix A, however it does not describe the range of actions (in combination) that would be necessary from the various sources in order to ensure that the objectives are achieved (e.g., can objectives be achieved if mines; geological background, and/or atmospheric deposition are not addressed?⁷).

In addition, for the time schedule, the Draft Staff Report does not recognize the likely 100+ year timeframe, noted by State Board staff at the February 7, 2017, Public Hearing, that it may take for the objectives to be achieved. Instead, it references that the time schedule for compliance will be determined on a discharge-by-discharge basis by the Regional Water Boards. It is critical that NPDES permittees not be held to a 5, 10, or 15 year timeframe when the State Water Board recognizes that the objectives will not be attained within that timeframe.

Lastly, there is no description within Appendix A regarding the surveillance/monitoring that would need to take place to ensure that the fish tissue objectives within ambient receiving waters are progressing towards or are in attainment.

The County requests:

Based on the results of the 13242 analysis, the program of implementation should be modified to ensure that it is commensurate with the achievability of the objectives and the primary factors that drive that achievability. The program of implementation must account for the controllability of the primary sources, the influence of unregulated sources, the extended timeframes necessary to achieve the objectives, and the compliance requirements for regulated discharges (especially if they are a de minimis source).

- **The Implementation of Water Quality Objectives (Section IV of Appendix A) should only require the implementation of best management practices (BMPs) when the municipal stormwater discharges are causing or contributing to a persistent exceedance of water quality standards.**

The Implementation of Water Quality Objectives (Section IV of Appendix A) includes a *de facto* requirement that the provisions specified in Section IV.D.3.b be incorporated in municipal stormwater NPDES permits where any of the mercury water quality objectives apply, even if the municipal stormwater permittees are already implementing a wide range of controls that address mercury, have not been found to cause or contribute to persistent exceedances of the objectives, or if there is already a TMDL. However, this is

⁶ Section 10.2 – *Considerations Required by Water Code Section 13242*

⁷ The Draft Staff Report identifies the principal sources of mercury pollution to the waters within California as historic mines and atmospheric deposition, Executive Summary (pg xx)

counter to other portions of the Draft Staff Report and is inconsistent with the approach taken for other stormwater permittees such as the California Department of Transportation and enrollees under the Construction General Permit. In fact, with regard to Phase I and Phase II municipal stormwater programs, the Staff Report notes:

- “For many MS4s, permits already contain such control measures and best management practices.”⁸
- “However, many of the existing general requirements in storm water permits can help reduce mercury in storm water. For example, Phase I and II MS4 permits contain requirements for public education outreach, pollution prevention, sediment controls for construction areas, and low impact development; all of these elements can also help reduce mercury in storm water.”⁹
- “Phase I and Phase II MS4s are, on the whole, a smaller source of sediments. The sediment and erosion controls in the current MS4s permits would fulfill the requirements for mercury.”¹⁰
- “Phase I and II MS4s already have some existing requirements for public education outreach, pollution prevention, sediment controls for construction areas, and low impact development. Additionally, street sweeping is already required by both Phase I and II MS4s. Street sweeping removes fine dust, which may contain mercury from brake pads or atmospheric deposition and keeps improperly discarded mercury containing items from contaminating storm water. If the required actions are already being conducted by an MS4 those activities would count towards compliance.”¹¹
- “Therefore, it is anticipated that the reasonably foreseeable methods of compliance are likely already being done by Phase I MS4s and there would be little to no change for Phase I MS4s. Phase II MS4s generally have fewer requirements, so it is estimated that some Phase II MS4s may need to add some of the activities described below.”¹²

Thus, based on the points listed above and the supporting discussion within the Draft Staff Report, it is clear that the Phase I municipal stormwater permits already contain a) robust erosion and sediment controls as a part of the Construction and Land Development programs; b) public education and outreach programs; c) household hazardous waste programs that accept key mercury containing items/materials; and d) additional requirements where mercury TMDLs have been adopted. As a result, it is unclear why Phase I municipal stormwater programs are being held to a different standard than other stormwater dischargers and required to implement the controls listed in IV.D.3.b prior to any assessment as to the sources of identified receiving water impairments.

⁸ Draft Staff Report, Executive Summary, page xxi

⁹ Section 6.11.1, page 136

¹⁰ Section 6.11.3, page 138

¹¹ Section 6.11.3, page 139

¹² Section 7.2.5, page 171

In addition, it is unclear 1) how the linkage between the mercury concentrations in stormwater discharges from urban areas and the definition of *Areas with Elevated Mercury Concentrations*¹³ was established; and 2) what best management practices (BMPs) would be required. Although the Draft Staff Report states that “for areas that are specifically designated as Areas with Elevated Mercury Concentrations, the Water Boards would be required to include best management practices for erosion control in MS4 permits”, the reality is that Phase I and Phase II permits may not cover all of the areas where there are elevated mercury concentrations and that, where there is coverage, the Phase I and Phase II permits already include requirements for erosion and sediment controls as a part of their construction programs. Therefore, it is unclear what additional controls are contemplated. Since discharges from urban areas are not a primary source of mercury and the municipal stormwater permits already include erosion and sediment controls, it is recommended that this provision be deleted.

Lastly, Appendix A should be modified to identify a compliance pathway for the discharge prohibitions and receiving water limitations for municipal stormwater permittees who are implementing the mercury pollution prevention and pollution control measures.

The County requests:

The language in Appendix A, Section IV.D.3.a be modified as follows:

Chapter IV.D.3 applies to storm water dischargers regulated under general and individual NPDES STORM WATER permits issued pursuant to Clean Water Act section 402, subsection (p) that have been found to cause or contribute to persistent exceedances of water quality standards or when a mercury TMDL is being developed and the municipal stormwater dischargers are a significant source. The PERMITTING AUTHORITY shall ~~consider~~ include the requirements in Chapter IV.D.3.b in individual and general NPDES STORM WATER permits when adopting or re-issuing the permits.

The language in Appendix A, Section IV.D.3.b.1 be modified as follows:

Phase I and Phase II MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) permits shall include one or more ~~a combination~~ of the following mercury pollution prevention and pollution control measures to reduce total mercury or methylmercury discharges where the stormwater discharges have been found to cause or contribute to persistent exceedances of water quality standards or when a mercury TMDL is being developed and the municipal stormwater dischargers are a significant source.: ~~All of~~ The following control measures are ~~required, except,~~ at the discretion of the PERMITTING AUTHORITY, additional measure(s) may be substituted for one or more measures ~~if the substituted measure(s) would provide an~~

¹³ AREAS WITH ELEVATED MERCURY CONCENTRATIONS: includes the following areas:

- 1) Areas located in the Coast Range mountains with naturally mercury-enriched soil or sediments with total mercury concentrations of 1 mg/kg or higher;
- 2) Areas located in an industrial area with soil or sediments with total mercury concentrations of 1 mg/kg or higher;
- 3) Areas located within historic mercury, silver, or gold mine tailings;
- 4) Areas located within historic hydraulic gold mining pits in the Sierra Nevada mountain range.
- 5) Any other area(s) determined by the PERMITTING AUTHORITY in the applicable order.

equivalent level of control or prevent total mercury or methylmercury pollution. If the PERMITTING AUTHORITY substitutes other measures, the justification shall be documented in the permit fact sheet or equivalent document. The effort involved in each of the required measures shall be proportional to the size and population of the MS4.

Delete the language in Appendix A, Section IV.D.3.b.2 as follows:

~~2) The PERMITTING AUTHORITY may include best management practices to control erosion in MS4 permits. However, the MS4 permit shall contain best management practices for AREAS WITH ELEVATED MERCURY CONCENTRATIONS.~~

Add the following language in Appendix A, Section IV.D.3.b.2 (new section) as follows:

2) Compliance Determination. MS4 permittees in full compliance with the implementation of the mercury pollution prevention and pollution control measures are deemed to be in compliance with the mercury discharge prohibition and water quality objectives incorporated into the MS4 permit.

Thank you for your consideration of these comments. Please contact Richard Boon at (714) 955-0670 or Jian Peng at (714) 955-0650, with any questions.

Sincerely,



Chris Crompton, Manager
Water Quality Compliance

Cc: (Electronic copies only)

Orange County Permittees

Orange County Technical Advisory Committee