



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901



AUG 14 2017

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

SUBJECT: Proposed Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California – Bacteria Provisions and a Water Quality Standards Variance Policy; and Proposed amendment to the Water Quality Control Plan for Ocean Waters of California – Bacteria Provisions and a Water Quality Standards Variance Policy

Dear Ms. Townsend,

The EPA appreciates the State Water Board's actions to update the bacteria standards for the protection of the recreation use in a manner that is consistent with the 2012 EPA criteria recommendations. Thank you for the opportunity to review and comment on the proposed bacteria revisions referenced above.

Beneficial Use: The Inland Surface Water, Enclosed Bays and Estuaries Plan (ISWEBEP) establishes a Limited Water Contact Recreation (LREC-1). No associated criteria to protect LREC-1 is provided and should be included.

Water Quality Objectives: The Ocean Plan establishes two Water Quality Objectives under the heading of Bacterial Characteristics. The first are Water Contact Objectives to protect REC-1 which are based on the EPA 2012 criteria. The second are California Department of Public Health (CDPH) standards which are based on the AB411 thresholds. It is unclear if the State Board wishes EPA to consider both objectives as water quality standards subject to EPA approval. In 2006 EPA approved the incorporation of the CDPH standards in the 2005 Ocean Plan as water quality standards. The proposed Ocean Plan contains language indicating that the Water Contact Objective is to be used for 303(d) listing and the CDPH standard is to be used for public beach notification programs. This is further complicated by language in Section II.1 of the proposal which indicates that "Any of the Bacteria Water Quality Objectives shall be implemented through National Pollutant Discharge Elimination System (NPDES) permits...". We recommend that the State Board remove the CDPH standards from the Ocean Plan to make clear that they are not water quality standards subject to EPA approval.

Program of Implementation: The ISWEBEP states that determination of attainment will be based on the geomean but implies that the geomean is only valid if there are more than 5 samples and recommends that the statistical threshold value (STV) should be used for attainment when there are less than 5 samples. This is not consistent with the EPA 2012 Recreation Criteria which recommend that geomean and STV should be calculated regardless of sample size. While we agree that a greater number of samples improves the reliability of the estimate, the use of only the STV for assessment creates a disincentive to sample more frequently to properly calculate a geomean.


The bacteria water quality objectives shall be implemented through permits *except* when allocations are already established through a TMDL. We find the implication that the new water quality objectives do not apply to entities covered by existing TMDLs to be problematic. The ISWEBEP also suggests that Regional Boards may convene a public meeting to evaluate the effectiveness of the TMDL to meet the new water objectives. However, the revisions do not address actions required if the TMDL evaluation finds that water quality objectives will not be attained. In such circumstances the TMDL would need to be revised and approved by the State and EPA.

The State Board is adopting provisions to address natural sources of bacteria by implementing the reference system/antidegradation approach developed for the Santa Monica Bay wet weather TMDL. These provisions apply only within the context of a TMDL and apply only to nonpoint sources (except for onsite wastewater treatment systems) and stormwater (except for industrial stormwater). Under these conditions the geomean shall be strictly applied along with a site-specific STV. The reference system and antidegradation approaches were conceived almost 15 years ago. Today we have improved tools for more rapid sanitary surveys and quantitative microbial risk assessments (QMRA). The State Board should consider how these tools will be implemented in both the reference system and antidegradation approaches.

The ISWEBEP contains several situations where REC-1 uses may not apply and can be downgraded with use attainability analyses (UAAs). A Regional Board may suspend REC-1 use during high flow conditions when water flow and velocity preclude the swimming use (i.e., high flow suspension). A Regional Board may suspend REC-1 use with a UAA for situations where the use is precluded either by freezing in the winter or drying up in the summer (i.e., seasonal suspension). The ISWEBEP would require that water quality in these cases would be protected by the REC-2 standards. However, as REC-2 standards vary widely (different indicators, different thresholds) across the state, it is unclear if this would provide equal levels of protection across the state. Finally, the ISWEBEP allows for Limited Water Contact Recreation Use (LREC-1) after a UAA indicating that REC-1 is unattainable. However, it is unclear what the water quality indicator and threshold would be to protect LREC-1.

Water Quality Standards Variances: The proposed bacteria revisions identify the mechanism for adopting a water quality variance in accordance with 40 C.F.R. § 131.14. The State Board should take this opportunity to review and update existing exceptions to the Ocean Plan or the ISWEBEP for consistency with federal regulations. See enclosure related to State Board Order No. WQ 79-16.

Sincerely,


Terrence Fleming
Environmental Scientist

Enclosure: The 1979 Exception Granted by State Board Order No. WQ 79-16

Since March 23, 1979, State Board Order No. WQ 79-16 has granted the City and County of San Francisco's eight wet weather diversion structures in the Richmond Sunset Sewerage Zone an exception to the Ocean Plan's prohibition against discharge or by-pass of wastewater not conforming to the Ocean Plan standards. In continuous effect for nearly four decades, this exception has been implemented through successive NPDES permits for the City's Oceanside Plant. During wet weather days, the Plant's current Oceanside permit does not require: (1) compliance with the Ocean Plan's recreational criteria for bacteria at the near shore diversion structures; (2) monitoring for bacteria in effluent from any discharge location; or (3) compliance with receiving water limitations. The City's receiving water monitoring of bacteria has shown exceedances of the bacteria standards during wet weather. The absence of effluent monitoring has complicated the task of delineating linkage between bacterial loadings in wet weather discharges and in receiving water and slowed the exploration of measures that other cities with combined sewer systems have taken to make water safe for contact use.

In light of the considerable age of the 1979 exception, public health implications, and 40 C.F.R. 131.14 requirements, the State Board should:

- describe how the Proposed Bacteria Provisions and Variance Policy interacts with the 1979 exception;
- if the 1979 exception is intended to be a variance, update it consistent with 40 C.F.R. 131.14, which requires, among other things, that the state reevaluate its variance provisions every five years and submit the results to EPA for approval under CWA section 303¹; and,
- if the 1979 exception is not intended to be a variance, describe how it complies with CWA section 303 and continues to be protective of beneficial uses.

¹ EPA's 1994 CSO Policy describes how short-term variances may be used in limited circumstances but are subject to public participation requirements and must comply with 40 C.F.R. 131.