



CVCWA

Central Valley Clean Water Association

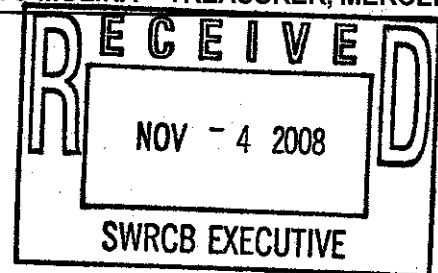
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November 4, 2008

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



Re: **CEQA Scoping for Proposed Revisions to Bacterial Standards for REC-1 Waters**

Dear Ms. Townsend,

The Central Valley Clean Water Association (CVCWA) appreciates the opportunity to comment on the CEQA scoping for the State Water Resources Control Board's (State Water Board) proposal for a statewide policy for bacterial standards for water contact recreation in fresh waters of California (proposed policy). CVCWA is an organization comprised of approximately 60 clean water agencies, which provide wastewater collection and treatment services in the Central Valley. Many of our member agencies discharge treated effluent to surface waters, and therefore may be impacted by the proposed policy.

CVCWA's CEQA scoping recommendations are presented to augment the Information Document of the proposed policy. This letter is not intended to convey a position on any particular element, but rather to assist the State Water Board in identifying all the alternatives that should be considered and identifying potential impacts that should be evaluated.

Element 1: Bacterial Indicators

As described in the Informational Document, this element would address the issue of setting a statewide bacterial indicator, using USEPA's (1986) recommended criteria guidance or other possible alternatives.

The Informational Document recognizes that all regional Basin Plans currently include bacteria objectives. Although the options for consideration include rescinding existing (fecal/total coliform) bacteria objectives for fresh water, there is no discussion on how the new objectives may impact or be impacted by Title 22 requirements for recycled water, which have frequently been used as the basis for POTW permit requirements in lieu of adopted objectives.

Recommendations:

1. The State Water Board should work with the California Department of Public Health (DPH) towards consistency in regulating and assessing bacterial indicators, including determining freshwater beach closures and permitting requirements. Multiple bacterial indicators can impact compliance and monitoring costs without necessarily providing discrete information regarding human health impacts. Options that would lead to consistent regulation should be explored in this process.
2. CVCWA encourages the State Water Board to look at a variety of indicator organisms beyond those proposed by USEPA and consider options that provide flexibility as to which organisms are used in different circumstances.

Element 3: Calculation of Effluent Limits

The Informational Document states that Element 3 will discuss the procedure for calculating effluent limits for bacterial indicators, with possible development of written guidance. The issues identified include: 1) No action; 2) Calculate effluent limitation based on effluent variability; and 3) Apply criteria end-of-pipe.

USEPA, in its 2004 promulgation of "*Water Quality Standards for Coastal and the Great Lake Waters*", includes a significant discussion on the use and potential applications of the single sample maximum (SSM) for Total Maximum Daily Load (TMDL) and NPDES permitting. USEPA (2004) states:

"EPA recognizes, however, that States and Territories also use criteria in their water quality standards for other purposes under the Clean Water Act in order to protect and improve water quality. Other than in the beach notification and closure decision context, the geometric mean is the more relevant value for ensuring that appropriate actions are taken to protect and improve water quality because it is a more reliable measure, being less subject to random variation, and more directly linked to the underlying studies on which the 1986 bacteria criteria were based."

"EPA recognizes that the single sample maximum discussion in the 1986 bacteria criteria document refers only to beach monitoring, and does not discuss how or whether the single sample maximum should be implemented for other Clean Water Act applications, such as establishing Total Maximum Daily Loads or National Pollutant Discharge Elimination System permit limitations. EPA agrees that the single sample maximum values in the criteria are best used for making beach notification and closure decisions. However, as noted above, they may, but need not, also play a role in implementing other Clean Water Act programs. Except in the beach notification and closure context, EPA expects that States will determine how to use the single sample maximum criteria in the context of their broader programs implementing the Clean Water Act."

"Application of the single sample maximum values in the criteria as never-to-be-surpassed limitations in other contexts could lead to consequences which were not contemplated in the 1986 bacteria criteria document, including, for example, Total Maximum Daily Loads and National Pollutant Discharge Elimination System permit limitations which might be technologically and economically unattainable at a particular location."

Recommendations:

1. CVCWA recommends the State Water Board evaluate and discuss the appropriateness of using SSM for each of its water quality programs including beach closure notifications. This evaluation should be done in consultation with DPH. In particular, CVCWA recommends that the State Water Board evaluate calculation of effluent limits based on the geometric mean density or other percentile value, rather than the SSM. The State Water Board should evaluate the actual risk to human health in light of the statistical variations in the data and the specific type of indicator organisms that are used. Some indicator organisms are more likely to translate to potential impacts than others.
2. CVCWA recommends that the State Water Board also explore measuring compliance with bacterial indicators at a point in the treatment process, which currently is the point of compliance for bacterial indicators in most NPDES permits and water recycling requirements. End-of-treatment-train compliance is typically used because POTWs have little or no control over bacterial inputs into treated effluent storage facilities from birds and animals. These inputs are similar to those that would be seen in a lake or other natural waterbody.
3. When evaluating the impacts of applying the criteria at the end-of-pipe, CVCWA recommends the State Water Board evaluate the environmental and economic impacts to those NPDES permit holders that use effluent storage as part as their operations (e.g. will additional treatment be required in order to discharge from storage? Will reservoirs need to be covered to protect them from birds and other wildlife?) Within this evaluation, the State Water Board should assess the potential impacts to current and future recycled water projects since storage is a key component of water recycling projects.
4. The State Water Board should evaluate the use of seasonally based effluent limitations in its process. Beach and REC-1 uses can vary substantially seasonally, and therefore the level of protection needed during the summer periods, on which the criteria were originally evaluated, may not be needed at other times of the year.
5. The State Water Board should survey REC-1 bacteria criteria in other States and include a summary of its findings in its draft proposal to ensure that California's regulatory approach is reasonably consistent with practices throughout the Country.

Element 4: Mixing Zones

Under this element, the Informational Document indicates the State Water Board will evaluate whether mixing zones should be allowed and, if so, procedures for use. The options currently described include: 1) No action; 2) Allow mixing zones in a small area near an outfall; 3) Do not allow mixing zones.

Recommendation: The State Water Board should also evaluate including other criteria under Option 2, such as distance from outfall/mixing zone to areas of recreational use.

Element 5: Averaging Periods

The Informational Documents indicates the State Water Board will evaluate the options for specifying an averaging period for use in determining compliance with proposed bacterial objectives. These include: 1) No action; 2) Specifying the geometric mean as a rolling average; 3) Specifying the appropriate averaging period.

USEPA (2004) allows for States to determine the appropriate averaging period in implementing the geometric mean, such as over the summer swimming season (recreation season) or when there is a statistically significant number of samples to adequately represent the waterbody.

Recommendation: The State Board should consider other averaging periods using the geometric mean, such as calendar month, recreation season, etc. The averaging period for compliance with the objectives should be connected to the averaging periods evaluated in the risk assessments performed in the establishment of the USEPA criteria values.

Element 7: Analytical Methods

Within this element, the Informational Document indicates the State Water Board will discuss the need for analytical methods for determining compliance with bacterial objectives. Options described include: 1) No action; 2) Specify analytical methods for receiving waters and various effluents.

Recommendation: CVCWA recommends that under option 2 above, the State Water Board cite to best available methods and provide flexibility for use of future methods that may be appropriate as technology advances, methods change, etc.

Element 8: Compliance Schedules and Interim Requirements

Within this element, the State Water Board would evaluate options surrounding the use of compliance schedules with interim requirements for achieving compliance with bacterial objectives. Options described in the Informational Document include: 1) No action; 2) Allow up to two-year compliance schedules; 3) Allow up to two-year compliance schedules with Regional Water Board discretion to establish compliance schedules up to five years.

Recently, the State Water Board adopted Resolution No. 2008-25, "Policy for Compliance Schedules in National Discharge Pollution Elimination System Permits," which provides for compliance schedules to meet new and more stringent permit limitations.

Recommendation: The State Water Board should consider allowing compliance schedules in accordance with Resolution No. 2008-25.

Element 10: Implementation of Bacterial Objectives in Regards to TMDLs

Under this Element, the State Water Board will consider the use of a natural sources exclusion implementation procedure. The Informational Document describes this procedure as requiring all anthropogenic ("manmade") sources of bacteria to have been controlled such that they do not cause or contribute to an exceedance of the single sample objectives. A certain frequency of exceedance of the single sample objective would be permitted based on the residual exceedance

frequency in the specific water body. The options to be evaluated include: 1) No action; 2) Allow a reference system/antidegradation approach or natural sources exclusion approach, 3) Do not allow a reference system/antidegradation approach or natural sources exclusion approach.

USEPA (2004) includes a footnote to allow natural source exclusions which is not limited to TMDLs and is applicable to both the geometric mean and single sample objective. The footnote reads:

"These values apply to [*E. coli* or enterococci] regardless of origin unless a sanitary survey shows that sources of the indicator bacteria are non-human and an epidemiological study shows that the indicator densities are not indicative of a human health risk."

This provision is not included in Table 1 of the Informational Document.

Recommendations:

1. The State Water Board should evaluate additional methods for allowing natural source exclusions beyond what is contemplated in the Informational Document. One method could allow exceptions under conditions similar to USEPA's, which does not limit the application to TMDLs or to single sample exclusions. Another similar evaluation should include allowing natural source exclusions where non-human sources of bacteria are not controllable.
2. As described in Element 3 above, SSM may not be appropriate in assessing whether waterbodies are impaired and require TMDLs. The State Water Board should consider limiting the use of SSM and utilizing geometric means or other percentile values for determining 303(d) listing status and TMDLs.

CVCWA appreciates the opportunity to comment and participate in this scoping effort. If you have any questions, please do not hesitate to contact me at (530) 268-1338.

Sincerely,



Debbie Webster, Executive Officer
Central Valley Clean Water Association

c: Pamela Creedon, CVRWQCB