

Tri-TAC

Jointly sponsored by:
League of California Cities
California Association of Sanitation Agencies
California Water Environment Association



Reply To: Sharon Green
LA County Sanitation Districts
1955 Workman Mill Road
Whittier, CA 90601

September 17, 2004

Via Electronic Mail, Facsimile & U.S. Mail
Arthur G. Baggett, Jr., Chair and Members
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100
Attn: Ms. Debbie Irvin, Clerk to the Board

Dear Chairman Baggett & Members of the Board:

Comments on August 2004 Proposed Amendments to the California Ocean Plan

The following comments are submitted on behalf of Tri-TAC, the California Association of Sanitation Agencies (CASA) and the Southern California Alliance of Publicly Owned Treatment Works (SCAP). Tri-TAC is a statewide organization comprised of members from public agencies and other professionals responsible for wastewater treatment. Tri-TAC is jointly sponsored by CASA, the California Water Environment Association, and the League of California Cities. CASA has 111 public agencies providing wastewater collection, treatment, recycling and/or disposal services located throughout the state. SCAP represents 61 wastewater agencies in the seven southern California counties from Santa Barbara to San Diego County and the Inland Empire.

We appreciate the opportunity to provide input to the State Water Resources Control Board (SWRCB) on potential revisions to the California Ocean Plan (COP). Tri-TAC, CASA and SCAP are pleased to see the SWRCB move forward with Ocean Plan amendments addressing water contact recreation and the reasonable potential analysis (RPA) process, as recommended in our comments provided to the SWRCB at its public hearing on Triennial Review in May 2004. Our organizations generally support the adoption of these amendments, subject to the comments and changes provided below.

Proposed Ocean Plan Amendment #1: Choice of bacteria indicator organisms for water-contact bacterial standards. Federal law requires states to develop water-contact bacterial standards at least as stringent as EPA's 1986 Ambient Water Quality Criteria for Bacteria. Since the COP's current objectives do not include enterococcus, as proposed in this amendment, the Plan does not comply with this requirement. However, the Department of Health Services' beach sanitation standards comply with this requirement. EPA has expressed concern regarding this discrepancy in an April 2004 letter to the Secretary of the California Environmental Protection Agency. Although CASA and Tri-TAC have previously provided detailed comments on the nature of these proposed amendments via our February 6, 2004 letter, we do support moving forward with this amendment as discussed in those comments.



Specifically, we support the adoption of an enterococcus water-contact standard and deletion of the single sample maximum standard. The proposed standards provide consistency with the Department of Health Services beach sanitation standards promulgated pursuant to Assembly Bill AB 411 (Chapter 765, Statutes of 1997). Bacterial measurements are inherently variable as indicators vary with a variety of influences apart from discharges to waters including recreation and wildlife. Single samples should be limited to use as a trigger for additional monitoring, or such results should be evaluated with other sample results, but not be used alone to determine attainment or nonattainment of the water quality standards. The concentration of fecal indicator bacteria varies over time scales that span several orders of magnitude, from minutes to decades and is due to a complex combination of local and external processes. No single sample result is an indication of the overall water quality for a given water body.¹ The geometric mean standard is a much better indicator of the attainment or nonattainment of bacterial standards for a specific water body as it is expected to be close to the true mean of bacterial concentrations in the waterbody.

The proposed amendment calls for daily sampling for exceedances of the single sample threshold unless a sanitary survey is completed. A number of our member agencies have extensive shoreline monitoring programs. They have indicated that daily resampling is an enormous staff, laboratory and cost burden. Therefore, we recommend that the amendment be modified to allow for monitoring less frequently than daily, especially in instances where known instances of contamination (e.g. storm drains) are the likely source for exceedances, even in the absence of a formal sanitary survey. Also, much of the shoreline monitoring is completed by POTWs; however, much of the shoreline contamination is associated with urban runoff and other shore-based sources. At a minimum, in the Final FED, the SWRCB must ensure that the monitoring burden, including costs that will result from these proposed amendments to the COP, bears a reasonable relationship to the need and benefits to be obtained. See Cal. Water Code §13267(b). Since "a description of surveillance to be undertaken to determine compliance with objectives" can be construed to include these monitoring requirements, these costs also must be considered pursuant to the consideration of economics under Section 13241(d).

The Draft Functional Equivalent Document (DFED) indicates that certain requirements (such as monitoring for total coliform only) would only apply in areas outside areas defined by RWQCBs as water-contact recreation areas. However, one problem with this approach is that some or all of the Basin Plans do not contain that level of specificity and refinement in the REC-1 use designations. For instance, the Los Angeles Region Basin Plan appears to designate all "nearshore" and "offshore" areas with a REC-1 (full body contact) use. See Table 2-3, Los Angeles Region Basin Plan. To rectify this problem and to improve the overall applicability and implementation of the proposed amendment, we recommend that the SWRCB require the RWQCBs to designate subcategories of the REC-1 use (for instance, by designating use subcategories corresponding to the different levels of beach usage identified in EPA's 1986 Ambient Water Quality Criteria for Bacteria), or at least to refine and clarify their use designations to indicate where in coastal waters the REC-1 use does and does not apply. There is no analysis in the DFED of the extent of full-body contact recreational use designations, nor has the alternative of refining these use designations using subcategories been identified or evaluated. This option should be addressed in the Final FED.

¹ Haile, R.W., Witte, J.S., Gold, M., Cressy, R., McGee, C.D., Millikan, R.C., Glasser, A., Harawa, N., Ervin, C., Harmon, P., Harper, J., Dermand, J., Alamillo, J., Barrett, K., Mides, M., Guang-yu Wang (1999) "The Health Effects of Swimming in Ocean Water Contaminated by Storm Drain Runoff" *Epidemiology*, Vol. 10, Number 4:355-363.

The DFED correctly states that Section 13241 of the California Water Code requires that a number of factors be considered when the State Board proposes new or revised water quality objectives. However, the DFED analysis is incomplete and inadequate. First, the DFED fails to include one of the required factors: "water quality conditions that could reasonable be achieved through the coordinated control of all factors which affect water quality in the area." See Cal. Water Code §13241(c). Analysis and consideration of this factor is not a trivial matter. Numerous coastal waters have already been listed as water quality segments not meeting standards on the State's Section 303(d) list. Recent research also indicates that with the application of an enterococcus standard, there will be far more water quality standards exceedances than with the total and/or fecal coliform standards.² The DFED fails completely to analyze the likely status of standards attainment (or nonattainment), the causes or sources of potential nonattainment, and the likelihood of being able to attain the standards. If for instance, it were to be found that natural background sources rendered a proposed objective unattainable, that information is supposed to be identified and considered prior to establishment of the water quality objective for a given water body. The analysis also appears to assume that the only entities that will be affected by this amendment are POTWs subject to NPDES permits, because these permitted entities perform monitoring and receive numeric limits in accordance with the Ocean Plan. The DFED fails to analyze the potential impacts on stormwater dischargers (particularly MS4 discharges), if for instance a coastal water segment is found not to attain the new standards and a Total Maximum Daily Load is established that imposes load reduction requirements on the stormwater permittees.

Both the attainability of the proposed water quality objectives and costs of such objectives must be discussed in the FED. Likewise, the DFED fails to include a "program to achieve objectives" in accordance with Section 13242 of the Water Code, which must include both "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," and "a time schedule for the actions to be taken." See Cal. Water Code §13242. As such, we also recommend that in performing this analysis, the SWRCB include a provision allowing schedules of compliance to be placed in permits by RWQCBs when found to be necessary and appropriate.

Proposed Ocean Plan Amendment #2: Define "reasonable potential" calculations to determine when water quality-based effluent limitations would be required. As many of the water quality objectives in Table B of the COP are at low levels including picogram and nanogram concentrations, the current method to determine reasonable potential needs to be updated. Tri-TAC, CASA and SCAP believe that the proposed approach to conducting reasonable potential analysis (RPA) will result in an improved process to determine when water quality-based effluent limits are necessary and appropriate. The statistically-based proposed approach is similar to methods established in other states. We believe that a statistically-based approach is superior because it provides confidence that effluent limits are being applied in a fair and consistent manner, and that they will be applied in permits when shown to be necessary to protect water quality.

The following changes to the proposed amendment are recommended to improve the proposed RPA process.

1. Step 4 should be revised to specify how non-detected data should be addressed when determining pollutant concentrations after mixing.

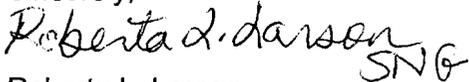
² Noble, Rachel T., Douglas F. Moore, Molly K. Leecaster, Charles D. McGee, and Stephen B. Weisberg, "Comparison of total coliform, fecal coliform, and enterococcus bacterial indicator response for ocean recreational water quality testing," in Weisberg, Stephen B. and Debbie Elmore (eds.), Southern California Coastal Water Research Project Biennial Report 2001-2002 (May 2003).

2. We recommend that Step 6 be revised to specify that a statistically-based RPA should be conducted only when at least 20% of the data are quantified (or, alternatively, that a minimum number of data points are quantified).
3. We recommend the deletion of Steps 9, 10, 11, and 12, which make reference to conducting a "sparse data RPA." The uncertainty associated with this analysis would be significant and would be greater than that using the statistically-based RPA approach as identified in the comments above for Step 6. We believe it is inappropriate to conduct an analysis with a data set with only one detected value that calls for assumptions regarding the summary statistics since, by definition, these can not be determined for the data set. Situations such as the one that is considered under this scenario would be better addressed by requiring a discharger to collect additional data, and once these data are available, then the reasonable potential analysis can be conducted. This approach is already incorporated in the proposed Step 15, which calls for requiring additional monitoring for a pollutant in place of a water quality-based effluent limitation if data are unavailable or insufficient to conduct an analysis.
4. We recommend that Step 14 be revised, because as written it allows a Regional Board to consider virtually any information in order to make a reasonable potential determination which may lead to inconsistencies in permit writing throughout the state and the assignment of effluent limits even when there may not be any evidence substantiating that the discharge contains pollutants at levels that will cause, have the reasonable potential to cause, or contribute to an excursion above a water quality standard. See 40 CFR §122.44(d)(1). Only if there is evidence linking one or more factors to actual or potential discharge of a pollutant at levels that could cause or contribute to water quality standards violations should there be authorization of inclusion of water quality-based effluent limits based on best professional judgment. We also believe that the SWRCB should authorize the use of non-numeric water quality-based effluent limits when limits are prescribed pursuant to Step 14.

Closing

Tri-TAC, CASA and SCAP recommend that the SWRCB proceed with the two amendments to the California Ocean Plan with the changes recommended above. Thank you for your consideration of these comments.

Sincerely,



Roberta L. Larson
Director, Legal & Regulatory Affairs
CASA



Sharon N. Green
Chair, Tri-TAC

cc: Celeste Cantu, Executive Director
Frank Roddy, Ocean Standards Unit
Ray Miller, Executive Director, SCAP