Tri-TAC
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League of California Cities
California Association of Sanitation Agencies
California Water Environment Association

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Reply to: 500 Capitol Mall, Suite 100
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Via Electronic Mail
Kathleen Harder
Regional Water Quality Control Board
Central Valley Region
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Subject: Tentative Waste Discharge Requirements Renewal (NPDES No. CA0077682) for Sacramento Regional County Sanitation District and Sacramento Regional Wastewater Treatment Plan, Sacramento County

Dear Ms. Harder:

The California Association of Sanitation Agencies (CASA) and Tri-TAC appreciate the opportunity to provide comments on the tentative waste discharge requirements (Tentative Permit) for the Sacramento Regional County Sanitation District's (SRCSD) Regional Wastewater Treatment Plant. CASA is a statewide association of local public agencies providing wastewater collection, treatment, water recycling and biosolids reuse services to millions of Californians. Tri-TAC is a technical advisory organization of clean water agencies in California jointly sponsored by CASA, the California Water Environment Association (CWEA), and the League of California Cities. Collectively, our members collect, treat, and reclaim more than two billion gallons of wastewater each day and serve most of the sewered population of California.

As organizations with a statewide perspective, we rarely submit comments on individual agency waste discharge requirements. However, the Tentative Permit for SRCSD raises a number of significant and unprecedented issues that could have implications for wastewater agencies throughout the state. We understand the Delta issues that provide the backdrop to drafting the Tentative Permit; as organizations dedicated to protecting water quality we share the Central Valley Regional Water Quality Control Board's (Regional Water Board's) commitment to taking all appropriate steps to safeguard the Delta. The communities served by many of our agencies rely on the Delta

for drinking water supplies. CASA and Tri-TAC do not categorically object to rigorous permit requirements where they are consistent with adopted regulations and reasonably necessary to protect the environment and public health; we also understand that meeting those mandates will require increased local expenditures. However, the Tentative Permit would impose numerous requirements that lack a sound scientific and technical basis, and may not be achievable even if billions of ratepayer dollars were expended.

Perhaps for the first time, the Tentative Permit represents an approach to permitting a publicly owned treatment works (POTW) that imposes strict regulation "just in case" such regulation "might be" appropriate; despite a dearth of relevant facts, data and other information demonstrating that the requirements are needed to comply with water quality standards, the Tentative Permit proposes to require SRCSD to comply with exceedingly stringent effluent limitations. Such an approach is not consistent with either the Clean Water Act or state law, which requires the Regional Water Board to regulate to "attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." (Wat. Code, section 13000.)

As detailed below, we have identified a number of deficiencies on several critical issues that warrant reconsideration of the permit – all of which include inconsistencies, approaches not based on sound science, and decisions that deviate from standard permit writing procedures.

A. Title 22 Treatment Criteria

The Tentative Permit requires SRCSD to treat its wastewater to Title 22 tertiary requirements without adequate findings or rationale. This level of treatment is unwarranted, and directly contrary to long-standing interpretations of the purpose of Title 22 requirements. As the San Francisco Bay Regional Water Quality Control Board has stated, "it is inappropriate to enforce CCR Title 22 total coliform criteria in a permit for surface water discharge because this regulation applies to recycled water; it does not apply to surface water discharges." (File No: 2189.8018 (TY), November 23, 2009 letter from Bruce H. Wolfe to Sheila K. Vassey at p. 3.)

The Reasonable Potential Analysis (RPA) discussion of pathogens contains various contradictions. The Tentative Permit states that "undiluted effluent will not be drawn into the agriculture intakes" and that "SRCSD discharge will not be carried far enough upriver during incoming tides to be captured by the Freeport intake." (Fact Sheet at p. F-73.) These statements of fact are at odds with the justification for the Title 22 treatment requirements on page p. F-72: "The stringent disinfection criteria of Title 22 are appropriate since the undiluted effluent may be used for the irrigation of food crops and/or for body-contact recreation."

We are concerned that the Regional Water Board is creating an unfunded mandate by requiring SRCSD to disinfect to Title 22 tertiary requirements. One of the asserted justifications for the treatment requirements is the "very high level of public contact with the receiving water." (Fact Sheet at p. F-75.) If this recreational use is the basis for requiring compliance with Title 22, this interpretation would lead to application of Title 22 to beach communities as well. This requirement would be clearly inappropriate, given that current accepted pathogen risk levels are set by the United States Environmental Protection Agency's (USEPA's) national risk criteria of 8 in 1,000 exposures. There is no technical evidence in the record of which we are aware of that supports significantly reducing the USEPA approved risk criterion from 8 in 1,000 to 1 in 10,000 as recommended by the California Department of Public Health (CDPH). (June 15, 2010 letter from Gary Yamamoto to Kenneth Landau, p. 3.) CDPH must provide the technical rationale for this significant change and the regulatory basis that allows CDPH to request that the Regional Water Board develop effluent limits based on CDPH's level of acceptable risk.

B. Ammonia, Nitrate and Nitrite Limits

The Tentative Permit recognizes that SRCSD's discharge is in compliance with USEPA acute and chronic ammonia criteria when mixing zones are considered. (Fact Sheet at p. K-1.) The Tentative Permit goes on to cite several hypotheses that investigate ammonia's role in the pelagic organism decline (POD). The lack of scientific consensus prompted the United States Congress and the Departments of the Interior and Commerce to request that the National Academy of Sciences review the factors, including ammonia, which *may* be contributing to the POD. The National Academy of Sciences review is expected to be complete in November of 2011.

If ammonia from SRCSD's discharge were shown to be contributing to the POD, we agree that additional regulatory action would be appropriate. However, the Tentative Permit includes very stringent ammonia limits despite an acknowledgement that this has not been demonstrated, and the scientific issues have not yet been resolved. As noted, both CASA and Tri-TAC advocate that regulatory decisions be based on sound science and not mere uneasiness or speculation. Decisions based on hypotheses or undeveloped science can have very real negative, unintended consequences. We recommend that the ammonia limitations be revised to implement USEPA criteria. As always, if new information becomes available with regard to ammonia, the permit may be reopened and the effluent limitations revised, if appropriate.

The ammonia limits in the Tentative Permit would require SRCSD to fully nitrify its effluent. This process, as detailed in the Fact Sheet at page F-71, would substantially increase the nitrate concentrations in the effluent. Had the Tentative Permit not required full nitrification to meet the ammonia limits, the nitrate concentrations would not have the potential to increase to such a high level. The justification for denitrification is based

not on evidence but on "theories that changing the ratio of nitrogen to phosphorus can change the ecology of a water body." (Fact Sheet at p. F-71.) The nitrate limits are not water quality based effluent limits (WQBELs), but were derived based on a treatability study; in setting limits without a water quality basis, the Tentative Permit proposes to impose technology based requirements that go beyond federal law and conflict with the Water Code provisions precluding the Regional Water Board from dictating the manner of treatment. (Wat. Code, § 13360(a).) As stated above, the law requires regulatory decisions to be based on sound science and facts in the record, not on unsettled theories. The need for any nitrate effluent limitations, and any such limitations, should be based on the MCL, with appropriate consideration of dilution.

C. WQBELs and State Implementation Policy

The State Policy for Implementation of Toxic Standards in Inland Surface Waters, Enclosed Bays and Estuaries (SIP) is intended to "establish a standardized approach for permitting discharges of toxic pollutants to non-ocean surface waters in a manner that promotes statewide consistency." (2005 SIP, at p. 3.) The SIP is clear and controlling on the process for calculating WQBELs for toxics. While regional water boards have discretion in determining the amount of dilution credit to be allowed, a permit can only limit or deny dilution credit if there is a defensible technical basis for the limitation. The State Water Quality Control Board (State Water Board) has affirmed that regional boards "must explain the denial of a mixing zone based on the facts of the discharge." (*In the Matter of Yuba City*, Order WQ 2005-013 at p. 10.) When evaluating whether to grant a mixing zone, the regional water board must "fully consider information in the record, the high cost to meet the effluent limitations without allowing this dilution credit, and the lack of evidence of any harm associated with such a mixing zone." (*Id*. at p. 12.)

In accordance with the SIP methodology, WQBELs for several pollutants listed in Attachment F (Bis (2-ethylhexyl) phthalate, carbon tetrachloride, chlorodibromomethane, dichlorobromomethane, pentachlorophenol, tetrachloroethylene, cyanide, manganese, and methyl tertiary butyl ether) should have been developed using appropriate dilution credits. However, the Tentative Permit proposes to deny the use of dilution credits because granting this "dilution credit could allocate an unnecessarily large portion of the receiving water's assimilation capacity." (Fact Sheet at p. F-57.) This determination deviates from the SIP and is inconsistent with precedential State Water Board orders. The proposed arbitrary denial of dilution credits as provided in state policy undermines the Regional Water Board's stated goal of creating consistency in permitting discharges of pollutants.

D. Hyalella Azteca Study

The tentative permit requires multiple special studies, including one intended to "develop procedures for conducting whole effluent toxicity (WET) testing using Hyalella

azteca as the test species." (Tentative Permit at p. 28.) The development of test procedures requires significant resources and expertise and is a role appropriately undertaken by large governmental agencies such as USEPA. We are concerned that the Regional Water Board is requiring a permittee to single-handedly develop a test procedure that could have consequences for the entire POTW community in California. Approved test procedures for toxicity already exist in federal regulations, and the Regional Water Board should require an approved toxicity test procedure from the 40 Code of Federal Regulations (CFR) list.

While a special study on Hyalella azteca may be warranted, we are concerned that the Regional Water Board is underestimating the resources needed to develop test procedures that can fulfill Task V (full implementation of WET testing using Hyalella azteca). Full implementation of WET testing using Hyalella azteca would require, among other things, 40 CFR, part 136, promulgation of the test method before it could be fully implemented into the WET program. Requiring SRCSD to develop test procedures as described in the tentative permit is not practical, nor is it justified. We request that this requirement be removed from the Tentative Permit.

Thank you for the opportunity to comment on SRCSD's Tentative Permit. We appreciate the Regional Water Board's efforts and recognize the importance that has been attached to this Tentative Permit by many stakeholders. Though a starting point for discussion, the Tentative Permit is not ready for adoption. We ask that the Regional Water Board reconsider the above mentioned requirements in the Tentative Permit, considering the economic burden that would be placed upon the permittee, and lack of scientific evidence and regulatory standards supporting the permit requirements, and issue a revised Tentative Permit for review and comment that is protective of beneficial uses and consistent with applicable law, regulations, and accepted permitting practices.

Sincerely,

Ben Horenstein
Chair
Tri-TAC

Roberta L. Larson
Director, Legal and Regulatory Affairs
CASA

RLL/BH/mb
cc: Stanley Dean, SRCSD – *Via Electronic Mail*