



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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Chief Engineer and General Manager

July 7, 2005
File No. 31-370.40.4A

Ms. Dena McCann
Division of Water Quality
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Dear Ms. McCann:

Comments on April 2005 Proposed Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California

The County Sanitation Districts of Los Angeles County (Districts) are pleased to provide comments on the scoping document for the proposed Total Residual Chlorine and Chlorine-Produced Oxidants Policy. By way of background, the Districts are a confederation of special districts, which operate and maintain regional wastewater and solid waste management systems to provide sanitation services for approximately 5.1 million people who reside in 78 cities and unincorporated areas in Los Angeles County.

As an agency that is currently required to comply with final effluent chlorine residual limitations and conduct continuous monitoring at many of our wastewater treatment plants, we request that the State Board's CEQA document consider the potential environmental impact of increased usage of chemicals for dechlorination which may be implemented by wastewater agencies to ensure that the final effluent chlorine residual requirements are met essentially 100% of the time. Although the State Board believes that the relocation of dechlorination facilities is not expected to have any adverse impacts on the environment as stated on page 21 of the informational document, we believe that the potential use of excess chemicals for dechlorination also needs to be considered in the environmental documentation for this policy. The types of environmental impacts that should be considered in the draft FED include transportation and associated air quality emissions for transport and delivery of greater amounts of dechlorination agents, environmental risks associated with the delivery/transfer of extra shipments of these chemicals (e.g., risk of spills), and potential water quality impacts associated with dosing at higher levels of dechlorination agents.

In addition, we have the following comments that we request the State Board consider.

We have concerns regarding the limitations of the equipment used for continuous chlorine monitoring. In order to assess compliance with the proposed freshwater objectives of 13 and 19 ppb, respectively, the continuous monitoring system must be capable of measuring chlorine residual down to 10 ppb accurately so that compliance can be based on reliable data. The proposed policy mandates that the system be calibrated at a concentration of no more than 500 ppb. For a system that is routinely calibrated at 500 ppb, as is proposed by the State Board on page 5 of the proposed policy, any results

produced below 500 ppb would have to be extrapolated assuming that the calibration curve is always linear to the origin. These extrapolated results are not reliable or reproducible and it is not scientifically valid to use them for the purpose of compliance determination. Indeed, requirements currently contained in the monitoring and reporting programs for the Districts' water reclamation plants that discharge to inland surface waters within the Los Angeles Region do not even allow the reporting of results extrapolated below the calibration curve.

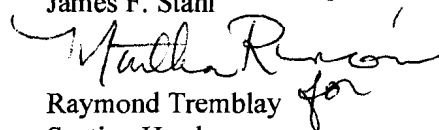
In addition, there are manufacturers that claim that their on-line continuous monitoring systems are capable of detecting chlorine down to 1 to 10 ppb, but the accuracy of the systems at these levels has never been validated. Some of the manufacturers also specify that the repeatability and stability are approximately 100 ppb. This would mean that a measured concentration of 50 ppb could be 150 ppb or it could be zero. The current available systems do not provide reliable measurements at the proposed compliance levels. Unlike other toxic pollutants that have compliance requirements, chlorine residual continuous monitoring equipment do not have established method detection limits (MDLs) or reporting limits (RLs). It is essential that the draft proposed policy provide guidance on how on-line system MDLs and RLs in wastewater matrix can and should be derived, what are the acceptance criteria for system performance and how the resultant values are to be used in compliance reporting.¹

Lastly, compliance schedules of longer than 2 years may be necessary as 2 years may not allow for sufficient time to develop site-specific objectives or to design and construct an alternate disinfection process should that be necessary. In the State Board's "Policy for Implementing the State Revolving Fund for Construction of Wastewater Treatment Facilities," as amended June 18, 1998, the State Board estimated that a *minimum* of 3.3 years is required to take a project from design to the initiation of operation, and that *some projects may take as long as 12 years to complete*. Additionally, the State Board has issued a "SRF Loan Program Flow Chart" that chronicles the process of obtaining State loan funding for facility upgrades. In this chart, the State Board recognizes that it could take 11.8 years to complete the funding process. The State Board should allow the Regional Boards to consider granting longer compliance schedules (up to 5 years) in cases where a discharger provides supporting information in regards to efforts and studies required to achieve compliance. In addition, the compliance schedule timeline should not begin until a discharger becomes aware that their facility cannot comply with the objectives and applicable effluent limitations.

In conclusion, we request that the State Board address the comments included above, as well as the comments contained in the comment letter dated July 7, 2005 submitted by the Bay Area Clean Water Agencies, Tri-TAC, California Association of Sanitation Agencies, and Central Valley Clean Water Agencies, which is incorporated herein by reference. If you have any questions about our comments, please contact the undersigned at (562) 699-7411, extension 2801 or Sharon Green at extension 2503.

Very truly yours,

James F. Stahl



Raymond Tremblay
Section Head
Monitoring Section

RLT:MR:drs

¹ Even if these are established, chlorination/dechlorination processes are sophisticated pieces of equipment that may be momentarily interrupted due to transient conditions and may take time to respond to changes in chemical dosing rates or to be able to switch over to the back-up system. Even the most highly sensitive and responsive equipment require a finite time to measure and respond to changing conditions, thus short duration excursions in chlorine residual are likely unless significant excess dechlorination agent is present. The State Board should acknowledge the possibility of equipment failure and provide for an "upset defense" in the proposed policy, similar to that provided under the Clean Water Act for technology-based limitations.