Chlorine Policy
Deadline: 7/14/06 5pm

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

1155 Market St., 11th Floor, San Francisco, CA 94103 • Tel. (415) 554-3155 • Fax (415) 554-3161

July 13, 2006

Ms. Song Her
Clerk to the Board
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814
Email: commentletters@waterboards.ca.gov

Dear Ms. Her:

Subject: Comments on the Proposed Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California – June 30, 2006 Draft.

The Water Enterprize of the City and County of San Francisco Public Utilities Commission (San Francisco PUC) appreciates the opportunity to comment on the proposed State Water Resources Control Board (State Water Board) Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California. The San Francisco PUC operates drinking water treatment facilities that utilize chlorine disinfection to comply with public health protection criteria. Existing NPDES permits also require the use of de-chlorinating chemicals to remove chlorine prior to discharging or releasing treated waters to receiving waters. The San Francisco PUC appreciates the State Water Board's efforts to address chlorinated water discharges via a single statewide policy. Effective treatment of discharges that can be toxic to various life stages of organisms in receiving waters must be undertaken to protect beneficial uses. We offer the following comments on the proposed water quality objectives and implementation issues raised in the June 30, 2006 draft policy.

Instrument Sensitivity and Reliability

The draft policy requires that continuous measurements be taken at least once per minute necessitating the use of on-line instrumentation capable of a manufacturer's stated detection limit of 10 parts per billion. We are concerned that the sensitivity required to comply with the proposed freshwater quality objectives [11 and 19 ppb respectively] cannot be routinely demonstrated by manufacturers of chlorine residual analyzers. Typically, even stated detection limits in this range are measured in highly controlled laboratory environments and do not reflect real world conditions at operating treatment plants.

Water treatment plant operations respond to a variety of changing conditions including, flow rate changes, opened or closed valves or gates and the number of pumps in operation. Chemical usage also changes with those conditions. Some water treatment facilities, recently permitted in 2004, operate intermittently and experience rapid flow rate changes, which can affect analyzer accuracy. Even highly sensitive and responsive instruments will need a period of time to equilibrate before accurate measurements can be made. The response time to changing conditions may result in excursions from the water quality objectives that are of short duration, of low concentration and not likely to have impacts to the receiving waters. It may indeed be infeasible for some facilities to comply with the new standard given the rigors of their operation.

We appreciate however that the revised policy recognizes that false positive readings associated even with well cared for and calibrated monitors are possible and allows dischargers to measure dechlorinating chemical dosages in order to verify compliance with the policy. In many cases facilities may be relying on this approach given the difficulties associated with real time accurate chlorine measurements at trace levels.

Once again we appreciate the opportunity to comment on the proposed policy and look forward to the resolution of the technical issues presented in our correspondence. Please contact me at 650 652-3125 if you wish to discuss the issues raised in this correspondence.

Sincerely,

James J. Salerno
Biological Services Manager
Natural Resources Division