

WATER COMMITTEE ISSUES SUMMARY
CHLORINE RESIDUAL
OCTOBER 2003

Background: The State Water Resources Control Board (SWRCB or State Board) has begun an initiative to implement the USEPA criterion for chlorine residual of 0.019 mg/l through the development of a State Chlorine Implementation Policy. This policy is also planned to include a requirement for continuous monitoring.

Status: The State Board convened a workgroup consisting of representatives from the various Regional Boards, the Department of Fish and Game, Publicly-owned treatment works (POTW) representatives and State Board staff working on this effort. The POTW representatives were Mike Mulkerin, SRWTP and Ben Horenstein, EBMUD. The current schedule is the development of the Functional Equivalency Document which is expected to be issued in a draft form in early 2004, including an economic analysis to be done by SAIC.

Issues: There are two key issues of concern to POTWs related to this initiative: 1) need for a statewide policy, given the difference in receiving waters throughout the state and 2) the ability of continuous field instrumentation to reliably analyze at this low level.

- 1) Need for a statewide Chlorine Residual Policy – The need for this initiative appears to have been generated during discussions around how SB707 MMPs would apply to chlorine residual and the range of policies and practices around the state. Examples include: (1) Region 8 has a standard which allows for compliance 99% of the time and, (2) Region 2 has an allowance for (a) showing that a false positive chlorine concentration has occurred if there is proof that sufficient dechlorinating agent was being applied at the time, or (b) an option to only measure compliance once per hour as long as continuous monitoring is in used. Further, there is a wide range in the types of receiving waters around the state, with correspondingly different instantaneous chlorine demands and relative impacts to local aquatic life. The USEPA standard was developed based on very sensitive species over some time frames likely not intended to be a limit for an effluent-dependent waterbody (EDW), irrigation ditch or ocean discharge.
- 2) Reliability of chlorine residual monitoring field instrumentation – There are a range of issues and concerns including method detection limits (MDLs), minimum levels (MLs), and operational reliability, which raise serious concerns regarding whether there is a practical way to continuously monitor chlorine residual at low levels in order to determine compliance with 0.019 mg/l. The POTW representatives on the SWRCB workgroup stressed the need to separate a water quality standard from the practical realities and constraints of a means to determine compliance.

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Current as of: October 31, 2003