Association of California Water Agencies
Leadership Advocacy Information Since 1910

July 14, 2005

***Via e-mail*:** dmccann@waterboards.ca.gov

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

Comments on Scope and Content of Proposed Draft Functional Equivalent Document (FED) for the proposed Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California

Dear Ms. McCann:

The Association of California Water Agencies (ACWA) appreciates the opportunity to provide comments to help define the scope and content of the environmental information which should be included in the draft Functional Equivalent Document (FED) for the proposed Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California (Proposed Policy) which is being prepared by the State Water Resources Control Board (SWRCB) in compliance with the California Environmental Quality Act (CEQA). ACWA represents over 450 public water agencies in California. Our members supply over 90% of the water delivered in California for domestic, agricultural and industrial uses. ACWA members are integrally involved in the management of surface water resources statewide to ensure that water supply needs are adequately addressed, acceptable surface and groundwater quality is maintained, and environmental effects are optimized in a balanced manner.

Chlorine is used by many of our member water agencies as a critical water treatment tool to ensure disinfection of water supplies and water conveyance systems to protect public health. These agencies occasionally have to discharge treated (chlorinated) drinking water into public storm water collection systems or other surface drainage systems as a part of routine maintenance (such as line flushing, and hydrostatic testing), and sometimes on an emergency basis due to water line ruptures or accidental discharges at water treatment facilities.

Discharges of chlorine residuals are currently regulated under the jurisdiction of the nine Regional Water Quality Control Boards, and our agencies are comfortable complying with current Regional Board requirements associated with discharges of chlorine residuals.

Any unreasonable new regulatory barriers to the discharge of chlorine residuals could lead to adverse public health and public finance impacts that will be felt statewide.

Comments of the Scope and Content of FED

1. Project Description – The FED must include a Project Description that includes:

    a. Environmental Benefits Disclosure. The FED needs to identify and characterize specific environmental benefits to be achieved by the proposed policy in enough detail to allow meaningful analysis against the "No Project" alternative (addressed below). Merely providing greater interpretive certainty, consistency and clarity for NPDES permit administration may not lead to actual environmental benefits to justify the proposed action. Where have failures of the current regulatory scheme actually resulted in demonstrated acute toxicity to aquatic life in receiving waters?

    b. Objective Criteria to Support Goals Statements. The Project Description needs to identify objective criteria to support the SWRCB's "statement of goals" so that the proposed policy and the alternatives can be evaluated. A public policy goal should be added to "achieve a balance between reasonable protection aquatic life beneficial uses while minimizing costs of compliance for all levels of government and the private sector".

    c. Disclosure of Technical and Policy Deficiencies. The Project Description needs to provide a disclosure of the following technical and policy deficiencies in the Proposed Policy in order to allow an objective assessment of its potential to achieve the SWRCB's goals and compare it to the policy alternatives (including the No Project/Regulatory Baseline Alternative – see further comment below). Some of the identified deficiencies include:

        1. There are no analytical methods that can accurately measure chlorine residuals at 1 ppb.

        2. The term "detection limit" is undefined. It is even less clear what it means in the context of on-line detectors. There is nothing in the Clean Water Act (CWA), California Toxics Rule (CTR), or the State Implementation Plan (SIP) that defines a "detection limit". There is of course the Method Detection Limit (MDL) which is defined in 40 CFR 136 appendix B but that has never been applied to on-line or in-line instruments, nor is it certain how it could be.

        3. There are no approved methods (or even feasible methods) that can accurately measure Chlorine-produced oxidants (CPO's) (bromine), certainly not to the concentrations in the Proposed Policy.

4. The Proposed Policy does not distinguish total and free chlorine or chlorine dioxide. Could chlorite (ClO2-) and chlorate (ClO3-), also be considered CPOs? The many interpretive uncertainties need to be disclosed.

5. The Proposed Policy needs to disclose the range of continuous discharges that may include chlorine residuals that are NOT associated with discharges from POTWs. There are also many types of non-continuous, intermittent, or sporadic discharges that should be to be characterized. For these discharges continuous monitoring is infeasible (under the definition contained in the Proposed Policy).

6. The SIP establishes a reporting scheme with three parts, with the Water Quality Based Effluent Limits (WQBEL) as the compliance threshold, the Minimum Level (ML) as the lowest quantifiable level, and the Method Detection Limit (MDL) as the lowest detectable but non-quantifiable level. To be consistent with the SIP, there would need to be a State-wide ML and a laboratory specific MDL. The Proposed Policy provides no discussion of ML or MDL so it is inconsistent with the SIP.

7. The SIP specifies that any result above the ML is assigned a numeric value, any result below the ML but above the MDL is reported as "detected but not quantified" (DNQ), and any result below the MDL is considered "non-detect" (ND). For averaging and compliance purposes, ND and DNQ are considered zero (0). The Proposed Policy does not appear to implement this scheme.

8. Compliance determinations for most analytes follow the following relationship: WQBEL > ML > MDL. For a few, the WQBEL is lower than the MDL. That would be situation here. In this situation, any result above the ML is automatically a violation. DNQs (ML > < MDL) are not in compliance but not a violation either. Usually some sort of BMP needs to be adopted is this situation. Results less than the MDL (ND) are also not out of compliance, if not actually in compliance. This entire scheme is missing from the Proposed Policy. Under the Proposed Policy any detection using current technology would be a violation. This is not an acceptable public policy situation.

2. No Project Alternative – The No Project Alternative needs to comprehensively describe the current regulatory scheme as it is administered by each of the nine Regional Boards, document specific examples of its legal and technical failures, and specifically document any adverse environmental consequences. This is the environmental and regulatory “baseline” condition against which the proposed policy and the policy alternatives must be analyzed and an “environmentally superior” alternative identified.

3. Policy Alternatives – The FED must present a "reasonable range" of policy alternatives that can achieve the environmental goals of the proposed policy as well as the public policy goals. These policy alternatives should include a regulatory program that would allow for different effluent limitations for different beneficial use designations in various water bodies. A policy alternative should also allow for use of mixing zones Statewide, unless receiving waters are specifically designated for beneficial uses that would be demonstrably harmed by chlorine residuals that are marginally higher than the standard in the Proposed Policy. Policy alternatives should also include a fully developed narrative standard and BMP's-oriented regulatory scheme that would rely on representative monitoring and reporting for non-continuous, intermittent, or sporadic discharges that would have minimal affect on receiving waters.

If invited, ACWA stands ready to work with other stakeholders to help the SWRCB refine the Proposed Policy before preparation of the FED, since that would probably lead to a better public policy outcome. However, we also expect to participate in the formal review of the draft FED and the administrative approval process to address the issues we have raised in this letter.

Although ACWA agencies are fully committed to protecting and maintaining California's water quality, we have strong reservations about the regulatory impacts of a flawed chlorine residual policy. We encourage the SWRCB to carefully consider all of the comments and to adequately address them as part of the FED process.

Sincerely

[original signed by]

David Bolland
Regulatory Affairs Advocate