

Principals

David R. Bennett
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June 17, 2005

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

RE: TOTAL RESIDUAL CHLORINE POLICY OF CALIFORNIA

Dear Ms. McCann:

We support the concept of continuous chlorine residual monitoring and automatic cessation of discharge at case-specific chlorine residual levels. Based on our years of experiences, the most acute threat to aquatic ecology posed by wastewater treatment plants is elevated chlorine residuals escaping from effluent disinfection processes for one reason or another.

Our principle concern with the proposed policy deals with detection levels, particularly for on-line devices. If wet chemistry (Method 4500-Cl E) has a detection limit of 10 µg/L, it is hard to believe that an on-line device can have a credible detection limit of 1 µg/L, particularly under continuous operation, field conditions.

To implement the policy as stated, we believe the State needs to provide evidence that at least one (and preferable three) chlorine residual monitors have been demonstrated by the State to be accurate and reliable down to 1 µg/L under actual secondary effluent field conditions.

This is a serious matter because of mandatory fines for violations of effluent limitations. A lot of public money (for fines, emergency storage reservoirs and responding to emergency diversion incidents) will be riding on the reliability and accuracy of these on-line devices.

Unless field data exist for such on-line devices, confirming their accurate, reliable, long-term performance under a reasonable range of field conditions, the policy appears to be premature for implementations considering the amount of public money put at risk.

Please let us know where we can review the State's data regarding on-line devices with a detection limit of $1\mu\text{g/L}$.

Sincerely,
ECO:LOGIC Engineering

A handwritten signature in black ink, appearing to read "Charles G. Bunker". The signature is fluid and cursive, with the first name "Charles" being the most prominent part.

Charles G. Bunker, P.E.
Principal

cc: ECO:LOGIC clients holding or contemplating NPDES permits