



August 16, 2017

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

VIA EMAIL: commentletters@waterboards.ca.gov

Subject: Comment Letter – Bacteria Provisions

Ms. Townsend,

The Bay Area Clean Water Agencies (BACWA) appreciates the opportunity to comment on the Draft Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Bacteria Provisions and a Water Quality Standards Variance Policy; and the Draft Amendment to the Water Quality Control Plan for Ocean Waters of California—Bacteria Provisions and a Water Quality Standards Variance Policy (Bacteria Provisions). BACWA is a joint powers agency whose members own and operate publicly-owned treatment works (POTWs) and sanitary sewer systems that collectively provide sanitary services to over 7.1 million people in the nine-county San Francisco Bay Area. BACWA members are public agencies, governed by elected officials and managed by professionals who protect the environment and public health.

BACWA supports the State Water Board reducing the health risk level to match EPA's most recent health risk level recommendations for the contact recreation beneficial use (REC-1). However, BACWA also recognizes that disinfecting wastewater effluent has ancillary environmental impacts. For agencies that use UV disinfection, higher UV doses for higher levels of disinfection require more energy. Chlorine disinfection for higher levels of bacterial indicator removal requires greater use of chemicals. This higher chlorine dosing leads to the generation of increased levels of disinfection byproducts, and requires larger doses of sodium bisulfite added to the effluent to quench the chlorine. Either UV or chlorine disinfection has a higher carbon footprint to achieve greater levels of disinfection. Because of these ancillary impacts, it raises a concern that Regional Water Boards might require agencies to disinfect beyond a level required to achieve water quality objectives. Balancing environmental and human health risks highlights the importance of using mixing zones when calculating effluent limits for municipal wastewater dischargers.

The Draft Staff Report for the Bacteria Provisions addresses mixing zones for point sources beginning on page 16. Most NPDES dischargers in the San Francisco Bay Region have


Enterococcus objectives for REC-1 applied as end-of-pipe limits, although mixing zones are allowed by the San Francisco Bay Basin Plan. The Draft Staff Report notes on page 17 that *“With no statewide policy, existing Regional Water Board policies and procedures will apply. Regional Water Boards would likely continue their current practices for allowing mixing zones where appropriate.”*

Given the impacts of excess disinfection, BACWA recommends that the State Water Board use this opportunity to encourage Regional Water Boards to use mixing zones in calculating bacterial indicator effluent limits, as allowed by their Basin Plans. BACWA suggests that the following language be added to the Bacterial Provisions, under Section IV.E.1:

Bacteria effluent limits for NPDES-permitted dischargers shall be calculated using mixing zones as allowed by their Region’s Water Quality Control Plans.

BACWA appreciates the opportunity to comment on the Draft Bacterial Provisions and thanks you for considering our input.

Respectfully Submitted,



David R. Williams
Executive Director
Bay Area Clean Water Agencies

cc: BACWA Board