March 10, 2014

Mr. Robert Schlipf
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

VIA EMAIL: robert.schlipf@waterboards.ca.gov

Subject: Comments on Tentative Order for Municipal Wastewater Discharges of Nutrients to San Francisco Bay, NPDES Permit

Dear Mr. Schlipf:

The Bay Area Clean Water Agencies (BACWA) appreciates the opportunity to comment on the Tentative Order for Municipal Wastewater Discharges of Nutrients to San Francisco Bay, NPDES Permit. 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 6.5 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.

Due to the precedential nature of this nutrient permitting process, BACWA has convened a team of representatives from large and small POTWs from each of the five subembayments. This letter reflects the concerns of that team of representatives, and as such, these comments represent the views of a wide range of our member agencies. However before delving into our comments we want to express our appreciation to you and the other Water Board staff for your efforts in developing this permit. Your desire to understand all of the concerns surrounding the very complex issue of nutrients and your demonstration of the highest level of professionalism in working with the POTW community is exemplary. Although we do not agree with every aspect of the permit, overall the permit is a sensible first step in understanding nutrients in the Bay and addressing their potential impacts.

On behalf of its member agencies, BACWA requests that the San Francisco Bay Regional Water Quality Control Board (Water Board) consider the following comments on the Tentative Order and hopes that changes will be made prior to issuance of the final Order.

1. **Future regulatory action should be tied to the results of the scientific studies.**

Page F-8 of the Tentative Order describes the Regional Water Board's plan to increase regulatory requirements in future permit cycles. While BACWA understands that the nutrient strategy is a multi-permit effort, we feel it is premature to speculate what future regulations

will entail because of the nascent nature of our understanding of potential impacts and control measures. It should be stressed in the language that any future load caps or other regulatory limits should be based on the results of the scientific studies that are being funded as part of this permit. Using the scientific underpinnings is the only way to ensure that public funds spent on nutrient load reductions will result in environmentally significant water quality benefits. As such, BACWA proposes adding the language underlined below to page F-8.

> *In the 2019 permit reissuance, the Regional Water Board anticipates considering establishment of performance-based effluent limits for nutrients and may require implementation of treatment optimization or other means to reduce loads or increase assimilative capacity if scientific studies show results that warrant such activities. The 2019 permit reissuance will also continue efforts to evaluate control measure scenarios as informed by load response modeling. In the 2024 and 2029 permit reissuances, the Regional Water Board anticipates using the information from studies conducted under earlier orders to require implementation of additional management actions, as needed.*

2. **BACWA recommends adding Fact Sheet language to clarify the requirement to report on the nutrient load impacts of optimization and upgrades implemented in response to other regulations or requirements.**

BACWA appreciates that the Tentative Order provides POTWs with the opportunity to describe how regulations and requirements not related to nutrient reductions may impact nutrient loads. This requirement recognizes that POTWs are under pressure to balance competing environmental and other benefits when deciding how to optimize or upgrade our facilities. For example, POTWs that upgrade their biosolids processing facilities to produce higher quality biosolids will end up with a higher nutrient concentration sidestream that will increase the load of nutrients in their effluent. Alternatively, other POTWs have completed optimizations for treatment plant reliability and have seen ancillary decreases in nutrient loads.

To better clarify the intent of this requirement in the Optimization and Upgrade Studies, BACWA proposes adding the following language to the Fact Sheet.

This Order requires Dischargers to evaluate the impact on nutrient loads due to treatment plant optimization and upgrades implemented in response to other regulations or requirements. The Regional Water Board understands reductions in nutrient loads may impact the loads of other pollutants in the effluent as well as biosolids quality, and vice versa. For example, an upgrade from biosolids incineration to anaerobic digestion will result in an increase in nutrient loading to the POTW effluent. This requirement will allow Dischargers to show how nutrient loads will increase or decrease after process changes are made in response to other regulations and requirements, and will help elucidate the balance of competing environmental benefits.

3. The subembayment boundaries should be based on hydrodynamic boundaries developed by the science team.

Due to the complex hydrodynamics of San Francisco Bay, the location of a discharge may significantly affect the ultimate fate and transport of pollutants discharged and, therefore, the ecological impact of that discharge. The Tentative Order implicitly recognizes this, and requires that Dischargers fund studies related to specific subembayments and document nutrient loads on a subembayment basis. The subembayment boundaries delineated in the Tentative Order are those established in the Basin Plan based somewhat arbitrarily on the location of the San Francisco Bay bridges, and are not reflective of actual San Francisco Bay hydrodynamics.

BACWA requests that the Basin Plan subembayment boundaries be replaced with those established by the Regional Monitoring Program in 2005 which are based on a review of available information on water and sediment transport. Recognizing that the subembayment boundaries relevant for understanding nutrient discharge impacts may change as nutrient science develops, BACWA further requests that a note be added to the end of section VII on page F-18 stating that the subembayment boundaries delineated in the permit are temporary and will be updated pending the results of scientific investigations into nutrient exchange between the subembayments.

4. The permit should not unnecessarily constrain how the funds for scientific studies are allocated

Section VI.C.3.b on page 7 specifies how the funds provided by the Dischargers shall be spent to support receiving water monitoring for nutrients. While BACWA agrees that it is likely that the funds will be at least partially allocated as described, it is premature to be overly specific in how the funds should be spent over the next five years. Additionally, the science team has not reached a final conclusion about whether monitoring will be done by boat or moored sensors, so it is too early to specify the need for monitoring stations.

BACWA proposes the following changes:

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> ***b. Support Receiving Water Monitoring for Nutrients***
> *The Dischargers shall collaborate with other regional stakeholders to support receiving water monitoring for nutrients, as necessary, that go beyond the monitoring already provided by the Regional Monitoring Program and others~~, by providing~~. Support may include the following:*
> *i. A network of nutrient monitoring ~~stations~~ locations to track nutrient concentrations, dissolved oxygen, and phytoplankton biomass in San Francisco Bay;*

ii. Adequate data to support modeling of nutrient fate and transport in San Francisco Bay; and

iii. Studies furthering the understanding of harmful algae bloom development, including, at a minimum, monitoring for algae species and toxins.

BACWA appreciates the opportunity to comment on this Tentative Order and thanks you for considering our concerns.

Respectfully Submitted,

David R. Williams

David Williams
Executive Director
Bay Area Clean Water Agencies

cc: BACWA Board