January 24, 2017

Mr. Bruce Wolfe, Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, 14th Floor
Oakland, CA 94612

Subject: NPDES Permit Requirements for Receiving Water Quality Monitoring, TMDL/SSO Support, Mercury and PCBs Watershed Permit Support, and Implementation of Copper Action Plans

Dear Mr. Wolfe:

I am writing on behalf of the Bay Area Clean Water Agencies (BACWA) and its members that own and operate publicly-owned treatment works (POTWs) and that have National Pollutant Discharge Elimination System (NPDES) permits to discharge to San Francisco Bay Area waters. The NPDES permits issued to these agencies impose some requirements that are most efficiently fulfilled as a group. The purpose of this letter is to report on behalf of BACWA members that those requirements are being met, including permit provisions related to: (A) Receiving Water Quality Monitoring, (B) Support for the RMP through the Alternate Monitoring Requirements (AMR), (C) Total Maximum Daily Load and Site Specific-Objective Support, (D) Mercury and PCBs Watershed Permit Support, (E) Copper Action Plan Support; and (F) Nutrient Watershed Permit Support.

A. Receiving Water Quality Monitoring

Various NPDES permits require that the permittees support the Regional Monitoring Program for Water Quality in the San Francisco Estuary (RMP), administered by the San Francisco Estuary Institute (SFEI), and established by San Francisco Bay Regional Water Quality Control Board (Regional Water Board) Resolution 92-043, adopted April 15, 1992. BACWA members have and continue to fulfill this requirement by participating in and providing funding to the RMP. A letter from SFEI, dated January 18, 2017, confirming BACWA member agencies' contributions to the RMP, is attached for reference.

B. Participation in the Alternate Monitoring Plan

In March 2016, the Regional Water Board adopted the Alternate Monitoring Requirements (AMR)[1], an Order that allows POTWs to reduce monitoring frequencies for specific pollutants in exchange for increased funding to the RMP. The Order calculates the additional fee for each agency to opt into the AMR based on its estimated cost savings associated with reduced

[1] Order No. R2-2016-0008 Alternate Monitoring and Reporting Requirements for Municipal Wastewater Dischargers for the Purpose of Adding Support to the San Francisco Bay Regional Monitoring Program (RMP).

monitoring requirements. The agencies who have opted into the AMR are listed in the attached January 12, 2017 letter from SFEI.

C. Total Maximum Daily Load and Site-Specific Objective Support

Some POTW permits previously included a requirement that permittees report to the Regional Water Board any actions taken in support of the development of Site-Specific Objectives (SSOs) and Total Maximum Daily Loads (TMDLs) for 303(d) listed pollutants. Support for these efforts has been provided largely through support of the RMP.

As part of the site-specific objectives (SSO), NPDES dischargers are required to calculate the 3-event rolling average of total cyanide concentrations in each segment of the Bay, based on RMP data. In 2016, the last three RMP water cruises (2011, 2013, and 2015) were used to update the averages.

In 2014, the RMP convened a Selenium Strategy Team and developed a Selenium Strategy in the Multi-Year Plan, and coordination within the Strategy Team continued in 2016. The new strategy includes measuring selenium in small tissue samples from sturgeon collected using non-lethal methods. In 2016, tissue samples were collected from sturgeon during non-lethal fish trawls in North Bay and during the Sturgeon Derby in Martinez. The tissue samples were analyzed for selenium to track implementation of the North Bay Selenium TMDL.

D. Mercury and PCBs Watershed Permit Support

The Mercury and PCBs Watershed Permit was reissued in 2012, and became effective on January 1, 2013[2]. The reissued permit has no requirements for Mercury Special Studies. BACWA will continue to work with the RMP to develop and implement an updated mercury science strategy.

The Regional Monitoring Program continues to perform the status and trend (S&T) monitoring and special studies needed to support management of mercury and PCBs in the Bay. Recent S&T monitoring for mercury has included sport fish in 2014 and 2015 (report coming in Q2 2017), open Bay sediment in 2014 (to be reported in the 2017 Pulse), water in 2015, margins sediment in 2015 (report coming in Q2 2017), and bird eggs in 2016.

Recent S&T monitoring for PCBs has included the same elements mentioned for mercury, with the addition of bivalves in 2014. Special studies for PCBs have also recently been a significant part of the RMP. The RMP PCB Strategy called for a multi-year study plan beginning in 2015 focusing on monitoring the response of priority margin unit receiving waters to management actions in high-leverage watersheds. Conceptual models and mass balances are being developed for four priority margin units (Emeryville Crescent, San Leandro Bay, Steinberger Slough, and Richmond Harbor). A report on Emeryville Crescent will be completed in January 2017. Using SEP funds, an extensive field study is also being conducted in San Leandro Bay to support development of the conceptual model, a mass balance, and a food web model in support of the possible revision of the PCBs TMDL.

[2] Waste Discharge Requirements for Municipal and Industrial Wastewater Discharges of Mercury to San Francisco Bay, Order No. R2-2012-0096; NPDES No. CA0038849

In 2016 BACWA's Bay Area Pollution Prevention Group (BAPPG) continued to reach out to dental assistant and dental hygienist students to educate them about proper amalgam management and disposal. In 2016, this campaign reached approximated 164 people at 7 speaking engagements. In December 2016, the Dental presentation was updated to reflect the new EPA Dental Rulemaking as well as the FDA's September 2016 ban of triclosan, triclocarban and 17 other antimicrobials in hand soaps and body washes (effective September 2017). In 2017, BAPPG will continue to provide the guest speaker to local colleges. The instructors have come to rely on these annual visits and have interwoven the BAPPG program into their instructional calendar.

The permit requires that permittees conduct or participate in programs to reduce mercury-related risks to humans from the consumption of Bay fish. In 2016 BACWA continued funding two grants worth $25,000 each to the California Indian Environmental Alliance, and APA Family Support Services, to conduct activities related to reducing risk from fish consumption in vulnerable populations. Work related to both grants began in 2015 and will be completed by 2017. BACWA coordinated with the grantees to provide a progress update on their risk reduction activities to the Regional Water Board on October 25, 2016.

E. Copper Action Plan

The copper action plan contained in many Bay Area POTW permits requires permittees to implement a plan to reduce copper discharges, conduct studies to reduce copper pollutant impact uncertainties, and implement additional measures should the three-year rolling mean in various parts of the Bay exceed site-specific concentration triggers. In 2016, the RMP analyzed water and sediment samples for copper to provide data relative to the implementation of the Copper Action Plan.

Regarding studies to reduce uncertainties in terms of the impact of copper on beneficial uses, in 2013, the RMP contracted with the National Oceanic and Atmospheric Administration Northwest Fisheries Science Center in Seattle to study the olfactory toxicity of copper on salmonids. The studies indicate that even at very high concentrations of copper in seawater (> 100 µg/L), Chinook salmon's sense of smell is not impaired. For juvenile salmon, copper concentrations up to 50 µg/L did not have impacts on the olfactory system at salinities >10 ppt. A journal article describing these results was published in 2016[3].

In addition to the measures being taken by individual agencies to reduce copper in discharges in 2015, BAPPG supported one presentation at a plumbing class at Laney Community College, Oakland (15 students) about BAPPG's flux and flushing BMPs.

During the public comment period of the U.S. EPA Review of Pesticides, BACWA asked that U.S. EPA evaluate risks and examine risk mitigation options for Copper products that are used in swimming pool, spa, and fountain treatments because pools, spas, and fountains are often discharged to POTWs in lieu of discharging to gutters/storm drains, and fabric treatments and subsequent discharges to POTWs during washing of the treated end product (e.g., clothing).

[3] Sommers F, Mudrock E, Labenia J, Baldwin D. Effects of salinity on olfactory toxicity and behavioral responses of juvenile salmonids from copper. Aquatic Toxicology. 2016 ;175.

F. Nutrient Watershed Permit Compliance

The Nutrient Watershed Permit[4] was adopted on April 2014, with an effective date of July 1, 2014. Through the nutrient surcharge levied on permittees, BACWA is funding compliance with the following provisions of the Nutrient Watershed Permit on behalf of its members:

- Group Annual Reporting – BACWA submitted the second Group Annual Report on October 1, 2016. All the permittees under the Nutrient Watershed Permit participated in the Group Annual Report.
- Optimization and facilities upgrade studies – Studies are ongoing, and an update was provided to Regional Water Board staff at BACWA's Annual Pardee Technical Seminar in October 2016. A progress update was submitted per permit requirement on July 1, 2016. A Final Report on the studies is expected prior to the July 2018 permit deadline.
- Support of scientific studies as part of the Nutrient Management Strategy – BACWA has provided $880K to SFEI in 2016. An update on the science plan for the 2016 calendar year will be submitted by February 1, 2017.

Please contact me if you have any questions about the information contained in this letter.

Respectfully,

David R. Williams

David R. Williams
BACWA Executive Director

Encl:
SFEI Letter regarding RMP Participation, January 18, 2017.

CC:
Mr. Bill Johnson, NPDES Permitting Division Chief, Regional Water Board
Mr. Richard Looker, Water Resources Control Engineer, Regional Water Board
Ms. Laura Pagano, BACWA Executive Board Chair
Mr. Eric Dunlavey, BACWA Permits Committee Chair

[4]Waste Discharge Requirements for Municipal Wastewater Discharges of Nutrients to San Francisco Bay, Order No. R2-2014-0014; NPDES No. CA0038873

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January 18, 2017

David R. Williams
Executive Director
Bay Area Clean Water Agencies
PO Box 24055, MS 59
Oakland, CA 94623

Dear Mr. Williams:

The Regional Monitoring Program for Water Quality in San Francisco Bay (RMP) is the only comprehensive environmental monitoring program to measure pollutants and trends in the Bay. The RMP, which began in 1993 and is still going strong, is a successful partnership of scientists, government, municipalities, and industries to understand and improve the health of the Bay.

The goal of the RMP is to collect data and communicate information about water quality in the San Francisco Estuary in support of management decisions. The accomplishments of the RMP over the past two years is summarized in the "RMP Update" report that was published in October 2016. The full report can be downloaded from http://www.sfei.org/rmp/update.

In 2016, 35 wastewater treatment facilities collectively contributed the full amount of the core RMP program costs assigned to publicly owned treatment works ($1,549,043, see Table 1 for a complete list of agencies). The process used to determine the core fees for each participant group are outlined in the Program Charter: http://www.sfei.org/documents/charter-regional-monitoring-program-water-quality-san-francisco-bay.

In March 2016, the Water Board adopted Order R2-2016-0008, establishing an alternative monitoring requirement (AMR) for municipal wastewater discharges to San Francisco Bay and its tributaries, in exchange for a set schedule of increased payments to the RMP. Participating wastewater treatment facilities who opt-in to this alternative are able to reduce their effluent monitoring costs for most organic priority pollutants and chronic toxicity sensitive species rescreening. In exchange for the reduced monitoring requirements, facilities make supplemental payments to the RMP for regional studies to inform management decisions about water quality in the Bay. In 2016, 30 wastewater treatment facilities made supplemental contributions to the Program under Order R2-2016-0008 ($235,077, see Table 1).

This support is essential to the Program. Through these financial contributions, the RMP is able to conduct regional monitoring to assess the cumulative impact of multiple sources of pollutants to the Bay. We thank you and your members for the support and look forward to serving you in 2017.

Sincerely,

Philip Trowbridge, PE
RMP Manager

Table 1

Wastewater Treatment Facilities Contributing to the RMP in 2016

POTW Dischargers	Core RMP Fees	AMR Order Fees
American Canyon, City of		
Benicia, City of	YES	YES
Burlingame, City of	YES	
Calistoga, City of	YES	YES
Central Contra Costa Sanitary District	YES	YES
Central Marin Sanitation Agency	YES	YES
Crockett Community Services District, Port Costa Sanitary Department		YES
Delta Diablo	YES	YES
East Bay Dischargers Authority	YES	YES
Union S.D.		YES
Oro Loma		YES
Hayward		YES
San Leandro		YES
Livermore		YES
Dublin San Ramon Services District		YES
East Bay Municipal Utilities District WWTP	YES	YES
Fairfield-Suisun Sewer District	YES	YES
Las Gallinas Valley Sanitary District	YES	
Marin County (Paradise Cove), Sanitary District No. 5 of	YES	YES
Marin County (Tiburon), Sanitary District No. 5 of	YES	YES
Millbrae, City of	YES	YES
Mt. View Sanitary District	YES	YES
Napa Sanitation District	YES	YES
Novato Sanitary District	YES	YES
Palo Alto, City of	YES	YES
Petaluma, City of	YES	YES
Pinole, City of	YES	
Rodeo Sanitary District	YES	
San Francisco, City and County Of, San Francisco International Airport	YES	YES
San Francisco (Southeast Plant), City and County of	YES	
San Jose/Santa Clara Water Pollution Control Plant and Cities of San Jose and Santa Clara	YES	YES
San Mateo, City of	YES	YES
Sausalito - Marin City Sanitary District	YES	YES
Sewerage Agency of Southern Marin	YES	YES
Silicon Valley Clean Water	YES	YES
Sonoma Valley County Sanitary District	YES	YES
South San Francisco and San Bruno, Cities of	YES	YES

St. Helena, City of	YES	
Sunnyvale, City of	YES	YES
US Department of Navy (Treasure Island)	YES	YES
Vallejo Sanitation and Flood Control District	YES	YES
West County Agency		YES
Richmond Municipal Sewer District		YES
West County Wastewater District	YES	YES
Yountville, Town of	YES	YES