



January 20, 2020

Mr. Michael Montgomery, 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. Montgomery:

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) Mercury and PCBs Watershed Permit Support; (D) Cyanide Action Plan; (E) Copper Action Plan Support; (F) Nutrient Watershed Permit Support; and (G) Total Maximum Daily Load 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 December 20, 2019, 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 monitoring requirements. The agencies who have opted into the AMR are listed in the attached December 20, 2019 letter from SFEI.

In 2019, AMR funds were used as described below:

- AMR funds fully or partially funded the following projects in 2019:
 - 2019 Ethoxylated Surfactants in Ambient Water, Margin Sediment, and Wastewater
 - 2019 Emerging Contaminants in Urban Stormwater (first year of a three-year study)
 - 2019 Microplastics in Sport Fish Tissue Archive
- The RMP published an updated strategy for Microplastics to guide future studies².
- The microplastics report, funded in large part by the Gordon and Betty Moore Foundation, with support from the RMP, was published³.

C. Mercury and PCBs Watershed Permit Support

The Mercury and PCBs Watershed Permit was reissued in 2017, and became effective on January 1, 2018⁴. The Mercury/PCB Watershed Permit required source control and risk reduction activities by the permittees.

In 2019, 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. This campaign reached a total of 172 students and instructors from January 1, 2019 – December 31, 2019 at the following site visits:

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).

² Sedlak, M.; Sutton, R.; Miller, L.; Lin, D. 2019. Microplastic Strategy Update. SFEI Contribution No. 951. San Francisco Estuary Institute: Richmond, CA.

³ Sutton, R.; Lin, D.; Sedlak, M.; Box, C.; Gilbreath, A.; Holleman, R.; Miller, L.; Wong, A.; Munno, K.; Zhu, X.; Rochman, C. 2019. Understanding Microplastic Levels, Pathways, and Transport in the San Francisco Bay Region. SFEI Contribution No. 950. San Francisco Estuary Institute: Richmond, CA. Available at:

https://www.sfei.org/sites/default/files/biblio_files/Microplastic%20Levels%20in%20SF%20Bay%20-%20Final%20Report.pdf

⁴ Waste Discharge Requirements for Municipal and Industrial Wastewater Discharges of Mercury to San Francisco Bay, Order No. R2-2017-0041; NPDES No. CA0038849

- San Jose City College (two classes)
- College of Marin, Novato (one class)
- Foothill College, Los Altos (one class)
- Santa Rosa Junior College (one class)
- Mt Diablo Adult Ed, Concord (two classes)

The instructors have come to rely on these annual visits and have incorporated BAPPG's program into their instructional calendar. Further, this is a very relevant audience for other messages, such as wipes, microplastics, and flea control.

The Mercury and PCB Watershed permit requires that permittees conduct or participate in programs to reduce mercury-related risks to humans from the consumption of Bay fish. In 2019, BACWA continued to fund contracts 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. Materials generated with support from BACWA's previous grants are available on BACWA's website⁵.

D. Cyanide Action Plan

As part of the site-specific objective (SSO) for cyanide, 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 2019, the RMP published updated results from the cyanide sampling during the 2017 Water Cruise⁶. Results indicate that ambient cyanide concentrations are below triggers but the rolling average increased in three of five regions.

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.

The RMP collected samples for copper during the 2017 Water Cruise. The method Brooks Analytical Laboratories used changed in 2017 so a report was delayed while they investigated how the results from the two methods differ. Results on copper concentrations from the 2017 Water Cruise have been updated based on the original

⁵ <https://bacwa.org/mercurypcb-risk-reduction-materials/>

⁶Shimabuku, I. 2019. 2017 Update to Cyanide Rolling Average. San Francisco Estuary Institute: Richmond, CA: Available online at: https://www.sfei.org/sites/default/files/biblio_files/CN%20Slides%20for%20Website%20%28Through%202017%29.pdf

method, reductive precipitate⁷. The data show that ambient concentrations of copper remained below trigger levels, decreased in four areas of the Bay, and increased slightly in one region (Central Bay).

In 2019, BACWA discontinued its presentations to plumbing classes at local colleges since it was found that the messaging was being ignored. Baywise.org hosts resources for plumbers that focus on the key messages pertaining to copper control. BAPPG plans to renew discussions regarding whether to update plumbing messages. In 2020, BAPPG will also provide information on copper plumbing mitigation and BMPs to City Building departments around the Region.

F. Nutrient Watershed Permit Compliance

The 2nd Nutrient Watershed Permit⁸ was adopted on May 8, 2019, with an effective date of July 1, 2019. 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 fourth Group Annual Report on October 1, 2018, which was the last Group Annual Report required under the 1st Nutrient Watershed Permit. All the permittees under the Nutrient Watershed Permit participated in the Group Annual Report. Because of the change in reporting schedule from a permit-year basis to a water-year basis under the 2nd Nutrient Watershed Permit, there was no Group Annual Report due in 2019. The next Group Annual Report will be submitted by the February 1, 2020 deadline.
- Nutrient Reduction by Recycled Water and Nature Based Systems Special Studies – The Scoping and Evaluation Plans for the two Special Studies^{9,10} required under the 2nd Watershed Permit were submitted by the December 1, 2019 deadline.
- Support of scientific studies as part of the Nutrient Management Strategy (NMS) – BACWA is providing a total of \$2,400,000 to SFEI in Fiscal Year 2020, in excess of the \$2,200,000 required by the Permit. The intention is to “frontload” the required funding to accelerate the pace of the science to more quickly yield data that will be used for management decisions in the 3rd Watershed Permit. The additional \$200,000 will count against payments in future permit years.

⁷https://www.sfei.org/sites/default/files/biblio_files/Cu%20Slides%20for%20Website%20%28Through%202017%29.pdf

⁸Waste Discharge Requirements for Municipal Wastewater Discharges of Nutrients to San Francisco Bay, Order No. R2-2014-0014; NPDES No. CA0038873

⁹ Recycled Water Scoping and Evaluation Plan - https://bacwa.org/wp-content/uploads/2019/12/BACWA_RW_ScopingEvalPlan_20191126.pdf

¹⁰ Nutrient Reduction by Nature Based Systems Scoping and Evaluation Plan - <https://bacwa.org/wp-content/uploads/2019/12/Final-NBS-Draft-Scoping-and-Evaluation-Plan-med.pdf>

- An update on the science plan reflecting the 2019 calendar year will be submitted by the February 1, 2020 deadline.

G. Total Maximum Daily Load Support

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

In 2014, the RMP convened a Selenium Strategy Team and developed a Selenium Strategy in the Multi-Year Plan. In 2019, the RMP conducted the following activities implementing the Strategy:

- Started a pilot monitoring program for selenium in clams and water to support the North Bay selenium TMDL.
- Published the results of the 2015-2017 Sturgeon Derby Study on selenium concentration in white sturgeon in North San Francisco Bay¹¹.

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

Respectfully,



David R. Williams, P.E.
BACWA Executive Director

Encl:

SFEI Letter regarding RMP Participation, December 20, 2019.

CC: Mr. Thomas Mumley, Assistant Executive Officer, Regional Water board
Mr. William Johnson, NPDES Permitting Division Chief, Regional Water Board
Mr. Xavier Fernandez, Planning and TMDL Division Chief, Regional Water Board
BACWA Executive Board
Ms. Samantha Engelage, BACWA Permits Committee Chair

¹¹ Sun, J.; Davis, J.A.; Stewart, R.; Palace, V. 2019. Selenium in White Sturgeon from North San Francisco Bay: The 2015-2017 Sturgeon Derby Study. SFEI Contribution No. 897. San Francisco Estuary Institute: Richmond, CA.

December 20, 2019

David 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, is a successful partnership of scientists, government, municipalities, and industry 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 are summarized in the RMP Update and the Pulse. The Pulse of the Bay was published in October 2019. Current and past Pulses can be downloaded [here](#); past RMP Updates can be found [here](#).

In 2019, 38 wastewater treatment facilities collectively contributed the full amount of the core RMP program costs assigned to publicly owned treatment works (\$1,691,449, 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 2019, 36 wastewater treatment facilities made supplemental contributions to the Program under Order R2-2016-0008 (\$279,301 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 2020.

Sincerely,



Melissa Foley, PhD
RMP Manager

Table 1

Wastewater Treatment Facilities Contributing to the RMP in 2019 and AMR for FY19

POTW Dischargers	Core RMP Fees	AMR Order Fees
American Canyon, City of		YES
Benicia, City of	YES	YES
Burlingame, City of	YES	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
East Bay Municipal Utilities District WWTP	YES	YES
Fairfield-Suisun Sewer District	YES	YES
Las Gallinas Valley Sanitary District	YES	YES
Marin County (Paradise Cove), Sanitary District No. 5 of		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	YES
Rodeo Sanitary District	YES	YES
San Francisco, City and County Of, San Francisco International Airport	YES	YES
San Francisco (Southeast Plant), City and County of	YES	
San José-Santa Clara Regional Wastewater Facility	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	YES
Sunnyvale, City of	YES	YES
Union Sanitary District	YES	
US Department of Navy (Treasure Island)	YES	YES
Vallejo Flood and Wastewater District	YES	YES
West County Agency	YES	YES
Yountville, Town of	YES	YES