



January 16, 2018

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, Mercury and PCBs Watershed Permit Support, Implementation of Cyanide and Copper Action Plans, Nutrient Watershed Permit Support, and TMDL Support

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) 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 29, 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

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).

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 29, 2017 letter from SFEI.

C. Mercury and PCBs Watershed Permit Support

The Mercury and PCBs Watershed Permit was reissued in 2012, and became effective on January 1, 2013². 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 RMP completed the following tasks related to mercury and PCBs in 2017:

- Published a final conceptual model report for PCBs in the Emeryville Crescent margin area³.
- Published an interim conceptual model report for PCBs in the San Leandro Bay margin area⁴.
- Published a final data report for San Leandro Bay field study⁵.
- Published a final report with the mercury and PCB results of the 2015 Central Bay Margins Sediment Study⁶.
- Collected samples for PCBs and mercury for the 2017 South Bay Margins Sediment Study. The results will be reported in 2018.
- Published the results for mercury and PCBs for the 2014 Sport Fish Study⁷.

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

³ Davis, J. A.; Yee, D.; Gilbreath, A. N.; McKee, L. J. . 2017. Conceptual Model to Support PCB Management and Monitoring in the Emeryville Crescent Priority Margin Unit. SFEI Contribution No. 824. San Francisco Estuary Institute: Richmond, CA. Available online at: <http://www.sfei.org/documents/conceptual-model-support-pcb-management-and-monitoring-emeryville-crscent-priority-margin>

⁴ Yee, D.; Gilbreath, A. N.; McKee, L. J.; Davis, J. A. 2017. Conceptual Model to Support PCB Management and Monitoring in the San Leandro Bay Priority Margin Unit: Phase I. SFEI Contribution No. 830. San Francisco Estuary Institute: Richmond, CA. Available online at: <http://www.sfei.org/documents/conceptual-model-support-pcb-management-and-monitoring-san-leandro-bay-priority-margin>

⁵ Davis, J.; Yee, D.; Fairey, R.; Sigala, M. 2017. San Leandro Bay PCB Study Data Report. SFEI Contribution No. 855. San Francisco Estuary Institute: Richmond, CA. Available at: <http://www.sfei.org/documents/san-leandro-bay-pcb-study-data-report>

⁶ Yee, D.; Wong, A.; Shimabuku, I.; Trowbridge, P. 2017. Characterization of Sediment Contamination in Central Bay Margin Areas. SFEI Contribution No. 829. San Francisco Estuary Institute: Richmond, CA. Available online at: <http://www.sfei.org/documents/characterization-sediment-contamination-central-bay-margin-areas-0>

⁷ Sun, J.; Davis, J. A.; Bezalel, S. N.; Ross, J. R. M.; Wong, A.; Fairey, R.; Bonnema, A.; Crane, D. B.; Grace, R.; Mayfield, R. 2017. Contaminant Concentrations in Sport Fish from San Francisco Bay, 2014. SFEI Contribution No. 806. Available online at: <http://www.sfei.org/documents/contaminant-concentrations-sport-fish-san-francisco-bay-2014>

- Published the results from recent Status and Trends Monitoring for mercury and PCBs in the 2017 Pulse of the Bay. The report contains graphs showing mercury and PCBs in 2014 sediment, 2014 sport fish, and 2016 bird eggs. Results for mercury in water in 2015 and mercury loads from the Guadalupe River are also provided⁸.
- Published results of stormwater monitoring of mercury and PCB loads during WY16. Samples of stormwater during WY17 were also collected⁹.
- Collected water samples from the Guadalupe River during floods in early 2017 to measure mercury loads from the watershed. These results will be reported in 2018.

In 2017, 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 2017, this campaign reached approximated Reached a total of 150 students and instructors from January 1, 2017 – December 31, 2017 at the following site visits:

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

The annual presentation at Santa Rosa Jr. College (which typically reaches 48-50 students) was canceled due to the fall fires that closed the school for two weeks, reducing the time available for instructors to complete their course. In 2018, BAPPG will continue to provide the guest speaker to local colleges. 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, microbeads, and triclosan. In 2018, BAPPG plans to update the Baywise.org documents for line flushing chemicals to better align with EPA regulations.

The permit requires that permittees conduct or participate in programs to reduce mercury-related risks to humans from the consumption of Bay fish. In 2017 BACWA completed funding of 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. BACWA coordinated with the grantees to provide a progress update on their risk reduction activities to the Regional Water Board on October 25, 2016. Materials generated with support from these grants are available on BACWA's website¹⁰.

D. Cyanide Action Plan

⁸ SFEI. 2017. The Pulse of the Bay: The 25th Anniversary of the RMP. SFEI Contribution No. 841. San Francisco Estuary Institute: Richmond, CA. Available online at: <http://www.sfei.org/documents/pulse-bay-25th-anniversary-rmp>

⁹ Gilbreath, A. N.; Hunt, J. A.; Yee, D.; McKee, L. J. 2017. Pollutants of concern reconnaissance monitoring final progress report, water years 2015 and 2016. SFEI Contribution No. 817. Available online at: <http://www.sfei.org/documents/pollutants-concern-reconnaissance-monitoring-final-progress-report-water-years-2015-and>

¹⁰ <https://bacwa.org/mercurypcb-risk-reduction-materials/>

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 2017, the RMP completed sampling for cyanide during the 2017 Water Cruise. Preliminary results indicate that ambient cyanide concentrations are below triggers. Final results will be published in early 2018.

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 2017, the RMP collected samples for copper during this year's Water Cruise. Preliminary data indicate ambient concentrations of copper remain below trigger levels. Final results will be reported in 2018. In the 2017 Pulse of the Bay (www.sfei.org/rmp/pulse), the three-year rolling-average concentrations of copper were reported using data from 2011, 2013, and 2015.

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 for the U.S. EPA Copper Registration Review risk assessment in 2016, BACWA recommended that U.S. EPA require users to contact local agencies and follow their instructions for draining copper-treated swimming pools, spas, and fountains to avoid copper pollution and collection system backup. EPA agreed and in 2017, they proposed such instructions be placed on all swimming pool and spa products. Although BACWA also recommended that EPA examine discharges from washing copper pesticide-treated fabrics, they declined to do so, responding that there are insufficient data to support a detailed assessment, and they do not believe that fabrics are likely to be a large wastewater copper discharge source.

F. Nutrient Watershed Permit Compliance

The Nutrient Watershed Permit¹¹ 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 third Group Annual Report on October 1, 2017. 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 2017. A progress update was submitted per permit requirement on July 1, 2017. A Final Report on the studies is expected prior to the July 2018 permit deadline.

¹¹Waste Discharge Requirements for Municipal Wastewater Discharges of Nutrients to San Francisco Bay, Order No. R2-2014-0014; NPDES No. CA0038873

- Support of scientific studies as part of the Nutrient Management Strategy – BACWA has provided \$1,080,000 to SFEI in 2017, in excess of the \$880,000 required by the nutrient watershed permit. An update on the science plan for the 2017 calendar year will be submitted by February 1, 2018.

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, and coordination within the Strategy Team continued in 2017. The Strategy includes measuring selenium in small tissue samples from sturgeon collected using non-lethal methods. In 2017, the RMP completed the following tasks related to Selenium monitoring:

- Published a final report with results from the 2015 Sturgeon Derby¹².
- Published an interim monitoring design framework for selenium in North Bay¹³.
- Funded USGS to continue clam tissue monitoring for selenium through October 2017.
- Collected 90 tissue plug samples from sturgeon captured by the California Department of Fish and Wildlife. These samples will be analyzed and reported in 2018.
- Collected tissue samples at the 2017 Sturgeon Derby. The results from this sampling round will be reported in 2018, in combination with the results from the 2016 Derby.
- Collected water samples for dissolved and particulate selenium during the 2017 Water Cruise. Extra samples were collected for laboratory intercomparison study of selenium methods. Results will be reported in 2018.

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

Respectfully,



David R. Williams
BACWA Executive Director

¹² Sun, J.; Robinson, A.; Davis, J. A.; Trowbridge, P.; A. Stewart, R.; Palace, V. P.; Jackson, Z. J. 2017. Selenium in White Sturgeon Tissues: 2015 Sturgeon Derby. SFEI Contribution No. 834. Available online at: <http://www.sfei.org/documents/selenium-white-sturgeon-tissues-2015-sturgeon-derby>

¹³ Chen, L.; Roy, S.; Rath, J.; Grieb, T. 2017. Water Column Selenium Concentrations in the San Francisco Bay-Delta: Recent Data and Recommendations for Future Monitoring. SFEI Contribution No. 836. Available online at: <http://www.sfei.org/documents/water-column-selenium-concentrations-san-francisco-bay-delta-recent-data-and>

Encl:

SFEI Letter regarding RMP Participation, December 29, 2017.

CC:

Mr. Bill Johnson, NPDES Permitting Division Chief, Regional Water Board
Mr. Richard Looker, Water Resources Control Engineer, Regional Water Board
BACWA Executive Board
Mr. Christian Dembiczak, BACWA Permits Committee Chair



SAN FRANCISCO ESTUARY INSTITUTE

4911 Central Avenue, Richmond, CA 94804 • p 510-746-7334 • f 510-746-7300 www.sfei.org

December 29, 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 "Pulse of the Bay" report that was published in October 2017. The full report can be downloaded from <http://www.sfei.org/rmp/pulse>.

In 2017, 35 wastewater treatment facilities collectively contributed the full amount of the core RMP program costs assigned to publicly owned treatment works (\$1,595,514, 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-0>.

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. For FY17, 34 wastewater treatment facilities made supplemental contributions to the Program under Order R2-2016-0008 (\$261,919, 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 2018.

Sincerely,

A handwritten signature in black ink, appearing to read 'Philip Trowbridge', is written over a faint, large watermark of the SFEI logo.

Philip Trowbridge, PE
RMP Manager

Table 1

Wastewater Treatment Facilities Contributing to the RMP in 2017 and the AMR for FY17

POTW Dischargers	Core RMP Fees	AMR Order Fees
American Canyon, City of		
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
<i>Union S.D.</i>		YES
<i>Oro Loma</i>		YES
<i>Hayward</i>		YES
<i>San Leandro</i>		YES
<i>Livermore</i>		YES
<i>Dublin San Ramon Services District</i>		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	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 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	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
<i>Richmond Municipal Sewer District</i>		YES
<i>West County Wastewater District</i>	YES	YES
Yountville, Town of	YES	YES

