



January 20, 2015

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) Total Maximum Daily Load and Site Specific-Objective Support, (C) Mercury and PCBs Watershed Permit Support, and (D) Copper Action Plan.

A. Receiving Water Quality Monitoring

Various NPDES permits require that the permittees participate in 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 31, 2014, confirming BACWA member agencies' contributions to the RMP, is attached for reference.

B. 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. There has been no ongoing work pertaining to SSOs in 2014. Cyanide will be monitored in ambient Bay waters in 2015 and the results will be compared to the cyanide SSO.

In 2014, BACWA has worked with the Regional Water Board to support the development of the North Bay and South Bay Selenium TMDLs. BACWA commented on the Bay-Delta Conservation Plan (BDCP), which will likely increase selenium loads to the North San Francisco Bay¹. The BDCP will increase the relative flows of the San Joaquin River compared to the Sacramento River through the San Francisco Bay Delta, and concentrations of selenium are higher in the San Joaquin River than the Sacramento River. The BDCP Environmental Impact Report (EIR) assigned responsibility for addressing these increased selenium loads to the North Bay Selenium TMDL process. BACWA recommended that the BDCP not rely on downstream management to mitigate these impacts.

In 2014, the RMP convened a Selenium Strategy Team and developed a Selenium Strategy in the Multi-Year Plan. The new strategy includes measuring selenium in small tissue samples from sturgeon collected using non-lethal methods. Another study in the strategy will determine correlations between selenium in sturgeon ovaries and muscle using fish caught for the Sturgeon Derby. These field sampling efforts began in 2014 and will continue in 2015.

C. Mercury and PCBs Watershed Permit Support

The Mercury and PCBs Watershed permit was reissued in 2012, 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.

In 2014, the RMP analyzed samples of ambient Bay sediment and sport fish for mercury. The preliminary data are being quality assured and will be uploaded to the SFEI Regional Data Center and CEDEN in 2015. The RMP also published a report³ summarizing advances in understanding of PCBs in the Bay since the development of the PCBs TMDL. The report presented a new conceptual model for PCB fate in the Bay, and provides a foundation for a multi-year study plan focused on detecting the response to load reductions in selected small tributary watersheds. The RMP also developed a monitoring design for measuring ambient concentrations of PCBs and other contaminants in sediments in the shallow margin areas around the edges of the Bay. The monitoring plan will be finalized and implemented in 2015.

In 2014 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 2014, this campaign reached approximated 272 people at 14 speaking engagements. In 2015, 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 past years, BACWA has collaborated with the Regional Water Board and other permittees to develop a risk reduction program. This

¹ BACWA letter at <https://bacwa.box.com/s/o068ai638ivzjmn264go>

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 http://www.sfei.org/sites/default/files/Davis%20et%20al%202014%20PCB%20Synthesis_1.pdf

program was directly implemented by the California Department of Public Health (DPH), as described in previous reports⁴.

Since the completion of the risk reduction efforts of the previous permit, the DPH lost the funding from the State that they would need to continue to staff their risk reduction efforts. In 2014 BACWA has investigated other opportunities to engage in risk reduction activities to comply with the permit. In November 2014, BACWA sent a proposal⁵ to the Regional Water Board listing potential ways to comply with the risk reduction element of the permit. Based on the response to the proposal by the Regional Water Board, in 2015, BACWA will fund ongoing work by one or more of the community-based organizations (CBOs) that had performed risk reduction work directly with impacted communities as part of the effort associated with the previous permit term.

D. 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.⁶

In addition to the measures being taken by individual agencies to reduce copper in discharges, in previous years the BAPPG continued their annual program to train plumbers on best management practices to reduce corrosion in copper water pipes, a major source of copper loading to POTWs. No plumbing presentations were provided in 2014, in part due to staff changes at key outreach sites, and in part due to saturation of messages at those sites. In 2014, BAPPG commissioned an analysis⁷ of copper versus PEX from life cycle and worker safety perspectives, which included information to support the use of PEX installations. This initiated discussions within BAPPG regarding whether to update plumbing messages. In 2015, BAPPG will continue to reach out to plumbing unions and community colleges regarding available presentation regarding plumbing BMPs and will consider reaching out to city building inspectors with a message supporting the use of PEX in plumbing installations and remodels.

Regarding studies to reduce uncertainties in terms of the impact of copper on beneficial uses, in 2013, the RMP contracted with the NOAA Northwest Fisheries Science Center in Seattle to study the olfactory toxicity of copper on salmonids. The work has been delayed due to federal funding shortfalls and laboratory equipment failures. However, in 2014, NOAA produced an interim

⁴ The 2013 final report and associated materials for the risk reduction effort is available on BACWA's website at: <https://bacwa.app.box.com/s/yq1m9bhmzzoeajk61f02>

⁵ Proposal at <http://bacwa.org/Portals/0/ExecutiveBoard/Library/BACWA%20Risk%20Management%20Comment%20Letter%2011-21-14.pdf>

⁶ The triggers identified in the San Francisco Bay Basin Plan Amendment incorporating Site-Specific Objectives for San Francisco Bay are as follows: Suisun Bay, 2.8 ug/L; San Pablo Bay, 3.0 ug/L; Central San Francisco Bay, 2.2 ug/L; Lower San Francisco Bay (north Hayward Shoals), 2.2 ug/L; Lower San Francisco Bay (south of Hayward Shoals), 3.6 ug/L; South San Francisco Bay: 4.2 ug/L.

⁷ Report at <https://bacwa.box.com/s/x757ck0cls5tr3x4heo9zjcs9kw4not2>

report in poster format⁸. The preliminary data show that increasing salinity reduces the bioavailability of copper for freshwater and seawater salmonids. The findings are preliminary because the Pacific Northwest National Laboratory, who was responsible for the water chemistry analyses, had an equipment failure that delayed the final results. A final report is expected by the end of January 2015.

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, December 31, 2014.

CC:

Ms. Lila Tang, NPDES Permitting Division Chief, Regional Water Board
Mr. Richard Looker, Water Resources Control Engineer, Regional Water Board
Mr. Mike Connor, BACWA Executive Board Chair
Ms. Meg Herston, BACWA Permits Committee Chair



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December 31, 2014

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 to 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 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. To that end, the RMP:

- Monitors water, sediment, and biota for toxic contaminants. In 2014, samples were collected for sediment, bivalves, and sport fish.
- Funds special studies to answer management questions. In 2014, \$1.68 million was allocated to special studies ranging from the fate of legacy pollutants to contaminants of emerging concern.
- Communicates findings through reports, meetings, and web tools. In 2014, the RMP released the latest RMP Update report (<http://www.sfei.org/rmp/update>), held the Annual Meeting, and updated the CD3 online tool for downloading RMP data (cd3.sfei.org).

In 2014, 35 wastewater treatment facilities (see attached table for a complete list) made a financial contribution to the RMP. 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 2015.

Sincerely,

Philip Trowbridge, PE
RMP Manager

Table 1
Wastewater Treatment Facilities Contributing to the RMP in 2014

Benicia
Burlingame
Calistoga
Contra Costa County Sanitation District
Central Marin
Delta Diablo
EBDA
EBMUD
Fairfield-Suisun
Las Gallinas
Millbrae
Mountain View
Napa
Novato
Palo Alto
Petaluma
Pinole/Hercules
Rodeo
San Francisco Airport
San Francisco C&C SE
San Jose/Santa Clara
San Mateo
Sausalito
Sewer Agency So. Marin
South SF/San Bruno
Sonoma
South Bayside
Sunnyvale
St. Helena
Tiburon (SD#5)
Union Sanitary District
Vallejo SFC
West County
Yountville
Treasure Island (US Navy)

