



January 17, 2014

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 and Cyanide 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, (D) Copper Action Plan, and (E) Cyanide 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 16, 2013, 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 is no ongoing work pertaining to SSOs at this time. Work completed in previous years is described in our letters to the Regional Water Board dated January 6, 2011, January 17, 2012, and January 24, 2013.

With respect to TMDL support, in 2013 BACWA developed an updated sampling, analysis and reporting protocol for low-detection PCBs method 1668C¹ to improve the quality of the reported PCB congener data, and to facilitate future reporting of the data to CIQWS. BACWA also supported special studies related to nutrient loading and impacts to San Francisco Bay.

In 2014, in addition to continuing to support nutrient studies, BACWA will work with the Regional Water Board to support the development of the North Bay selenium TMDL, and participate in the development of a selenium science strategy through the RMP.

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.

With respect to pollution prevention activities, 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 2013, this campaign reached approximately 450 people at 18 speaking engagements.

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 program was directly implemented by the California Department of Public Health (DPH), as described in previous reports³.

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 2013 BACWA has investigated other opportunities to engage in risk reduction activities to comply with the permit. The Delta Mercury Exposure Reduction Program (MERP) is getting underway, and it may be possible to partner with that program to leverage resources and realize benefits in both the Delta and San Francisco Bay Regions. For example, there may be an opportunity to cofund a health educator through the DPH who will conduct risk reduction work in both Regions. BACWA is currently working with staff at the Central Valley Regional Water Quality Control Board to identify opportunities for collaboration. Once the Delta MERP participants have finalized their administrative structure and contracting mechanisms, anticipated in early 2014, BACWA will work with them to identify opportunities for San Francisco Bay permittee contribution and participation.

¹See *Sampling, Analysis and Reporting Protocol Using EPA Method 1668C for Final Order R2-2012-0096, NPDES Permit No. CA0038849*, Bay Area Clean Water Agencies, December 31, 2013.

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

³The 2013 final report and associated materials for the risk reduction effort is available on BACWA's website at: <https://bacwa.app.box.com/s/yq1m9bhmzoeajk61f02>

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.⁴ In addition to the measures being taken by individual agencies to reduce copper in discharges, 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. In 2013, four presentations were conducted throughout the Bay Area to contractors, building inspectors and college students, reaching more than 180 participants.

Regarding studies to reduce uncertainties in terms of the impact of copper on beneficial uses, please see the attached letter from the RMP confirming that funding has been provided to the National Oceanic and Atmospheric Administration's Northwest Fisheries Science Center to study the impact of copper on the salmon olfactory response. In 2012, SFEI analyzed available RMP data and determined that the copper triggers for additional measures were not exceeded in the 30 ppt salinity range.⁵ SFEI set aside funds in 2013 to have NOAA conduct additional work studying the effect of copper on salmon in mid-range salinities (~10 ppt). Federal funding shortfalls during the fall of 2013 necessitated NOAA to switch from Chinook to Coho causing a delay in this work. It is anticipated that the Coho will smolt and be ready for the experiments in Spring 2014. The study results are expected to be available in the Fall of 2014.

E. Cyanide Action Plan

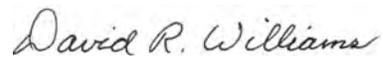
Many Bay Area POTW permits require agencies to identify and abate cyanide sources if Bay receiving water monitoring reveals cyanide concentrations equal to or greater than 1.0 µg/L. All of the 2011 results reported to SFEI by the laboratory conducting the analysis for whole water weak acid dissociable cyanide used an elevated method detection limit (MDL) of 1.5 µg/L. The mean of the raw results (the majority individually < 1.0 µg/L) was 0.3 µg/L weak acid dissociable cyanide. Because weak acid dissociable cyanide is a more conservative analytical approach compared to free cyanide (i.e., it is a bulk parameter that includes free cyanide), it is unlikely that the trigger was exceeded even in the absence of quantitative data. Additional monitoring was conducted in 2013, where SFEI coordinated with the laboratory to improve the analysis to get quantitative results below the 1.0 µg/L target level. In 2013, all of the samples were below the reporting limit (RL) of 1.0 µg/L weak acid dissociable cyanide. Four samples were between the MDL of 0.44 µg/L and the RL; the remaining were below the MDL.

⁴ 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 µg/L; San Pablo Bay, 3.0 µg/L; Central San Francisco Bay, 2.2 µg/L; Lower San Francisco Bay (north Hayward Shoals), 2.2 µg/L; Lower San Francisco Bay (south of Hayward Shoals), 3.6 µg/L; South San Francisco Bay: 4.2 µg/L.

⁵ The first year of study report is located on the RMP website (<http://www.sfei.org/documents/impact-dissolved-copper-olfactory-system-seawater-phase-juvenile-salmon>).

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

Respectfully,

A handwritten signature in cursive script that reads "David R. Williams".

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

Encl:

SFEI Letter regarding RMP Participation, December 16, 2013.

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
Mr. Tim Potter, BACWA Permits Committee Chair



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December 16th, 2013

David R. Williams
Executive Director
Bay Area Clean Water Agencies
Oakland, California

Dear Mr. Williams;

The 34 wastewater treatment facilities (see attached table for a complete list) made a financial contribution to the Regional Monitoring Program for Water Quality in San Francisco Bay (RMP) in 2013. 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.

The RMP conducts biennial monitoring of water and sediment throughout the Bay, starting at the confluence of the San Joaquin and Sacramento Rivers near Benicia and ending in the South Bay near San Jose. The biennial monitoring is staggered each year such that the RMP will be on the Bay each year. In 2014, the RMP will collect sediment samples from 47 sites; in 2015, we will conduct water sampling at 22 sites. Also in 2014, we will collect bivalve and sport fish tissues. Monitoring of biota, including bivalves, bird eggs, and sport fish occurs every second, third, or fifth year, respectively. Samples collected are subject to a wide variety of tests including organics analyses (e.g., PCBs, PAHs, PBDEs, and pesticides), metal analyses (e.g., cadmium, lead, total mercury and methylmercury), and toxicity tests.

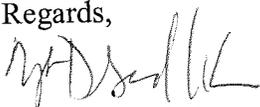
A report on the most recent round of RMP sport fish sampling was released in 2011 by the State Water Resources Control Board's Surface Water Ambient Monitoring Program (SWAMP), in collaboration with the RMP and the Southern California Bight Regional Monitoring Program. The report analyzed methylmercury levels within San Francisco Bay sport fish and compared levels to other coastal locations. The report received media attention statewide and resulted in updated safe eating guidelines for the Bay. In addition, the RMP continues to monitor bird eggs for mercury on a triennial basis. Most recent sampling occurred in 2012.

In addition, the RMP has provided funding to the NOAA Northwest Fisheries Science Center to conduct a study to evaluate the effects of copper on the olfactory nerve of salmonids under estuarine conditions. A preliminary update for this study has been written and sent to stakeholders. Additional work will continue in 2014.

The RMP has prepared three draft documents summarizing the state of our knowledge on mercury, PCBs and the flame retardants polybrominated diphenyl ethers (PBDEs). An update on the state of our knowledge regarding chemicals of emerging concern was the focus of this year's Annual Meeting and the Pulse of the Bay.

All of the data undergo rigorous quality assurance and quality control before being made public through the RMP web site (www.sfei.org/RMP), RMP documents (<http://www.sfei.org/documents>), and the RMP Annual Meeting (http://www.sfei.org/calendar_events/2012RMPAnnualMeeting). All RMP participants receive a copy of the biennial Pulse of the Estuary or a copy of the more concise RMP Update in alternate years; both summarize key RMP findings. In addition, all of the RMP data are reported in the Annual Monitoring Results report, which is available from our web site. The 2013 data will be reported in 2014. Again, we thank you for your valuable contribution to the Program.

Regards,



Margaret Sedlak
RMP Program Manager
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4911 Central Ave
Richmond, CA

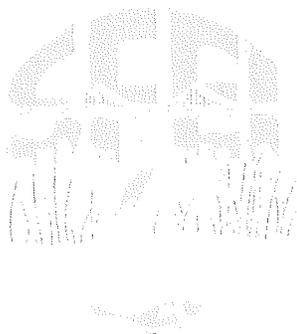


Table 1
Wastewater Treatment Facilities Contributing to the RMP in 2013

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

