

# **KEY REGULATORY ISSUE SUMMARY Updated September 15, 2017**

Contents	Page	Contents	Page
Nutrients in San Francisco Bay - Science	1	ELAP Update	6
SF Bay Nutrient Watershed Permit	2	Phaseout of Biosolids as Alternative Daily Cover 7	
Chlorine Residual Compliance	3	Climate Change Mitigation	8
Pesticides	3	BAAQMD Rule 11-18	9
Mercury/PCBs Watershed Permit	4	Federal Dental Amalgam Rule	10
State Water Board Toxicity Provisions	5	Recycled Water General Order	10
Compounds of Emerging Concern	5	Acronyms	11

Action items for member agencies are in **bold** 

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources			
NUTRIENTS IN SAN FRANCISCO BAY – SCIENCE						
<ul> <li>SF Bay has historically been resilient to nutrient impacts because of tidal mixing, clam grazing, and high turbidity. However, turbidity has decreased due to capture of sediment by upstream dams, and clam populations are on the decline. Additionally, nutrient loads to the SF Bay are increasing with population. There is concern that SF Bay may lose its resiliency in the future.</li> <li>Because of the complexity of the science behind nutrient impacts in the SF Bay, stakeholders in the region are participating in a steering committee to prioritize scientific studies and ensure that all science to be used for policy decisions is conducted under one umbrella.</li> <li>The watershed permit specifies \$880K/yr of funding from POTWs to the RMP, which BACWA has provided for FY17.</li> </ul>	<ul> <li>For FY18, BACWA is voluntarily contributing an additional \$200k to the science program.</li> <li>Agencies are conducting effluent monitoring under the watershed permit.</li> <li>Current efforts are focused on expanding monitoring data, modeling, and work exploring the linkage between nutrients, dissolved oxygen, and harmful algal species</li> </ul>	<ul> <li>Continue to participate in steering committee and planning subcommittee, and provide funding for scientific studies.</li> <li>Participate in the Nutrient Technical Workgroup, which is a venue to provide technical input to the process, and is open to the public, as well as the Stakeholder Advisory Group.</li> </ul>	BACWA "Other Useful Nutrient Documents" Page: http://bacwa.org/nutrients/other-useful-nutrient-documents/  SFEI Nutrient Science Plan Documents: http://sfbaynutrients.sfei.org/books/reports-and-work-products			

## SF BAY NUTRIENT WATERSHED PERMIT

- The nutrient watershed permit was adopted in April 2014, with an effective date of July 1, 2014.
- Through the nutrient surcharge levied on permittees, BACWA funds compliance with the following provisions of the nutrient watershed permit on behalf of its members:
  - Group Annual Reporting
  - Optimization and facilities upgrade studies
  - Support of scientific studies through the RMP at \$880K per year through the five-year permit term, and voluntary \$200K contribution for FY18.
- Consultant team was selected by BACWA Contract Management Group to lead the Optimization and Upgrade studies and annual reporting. The Scoping and Evaluation Plans for the optimization/upgrade studies were submitted to the Regional Water Board in December 2014 and finalized in February 2015. Agencies participating in these studies completed a questionnaire about their facilities' infrastructure, operations, and site constraints. The Consultant team conducted site visits in April through September 2015.
- BACWA hosted workshops on June 28, 2016, and June 7, 2017, to discuss Facility Reports with member agencies, and showcase emerging technologies for nutrient removal.
- BACWA and SFEI most recently submitted a science implementation plan and schedule update on February 1, 2017, and an Optimization/Upgrade study progress update on July 1, 2017.
- All agencies covered by the Nutrient Watershed Permit participated in the first Group Annual Report, submitted Nov 12, 2015, and the second Group Annual Report, submitted October 1, 2016. Agencies are now reporting to BACWA via a data sheet developed by the consultant

- Agencies continue to report nutrient monitoring to the Water Boards through CIWQS and to BACWA via the data sheet. The 2017 Group Annual Report will be submitted on October 1, 2017.
- The consultant is responding to comments on individual Facility Reports. The Reports must be signed off by agency points of contact for inclusion in the Optimization/Upgrade studies.
- BACWA, via the Nutrient Strategy Team, and the Regional Water Board are engaged in discussions about the Nutrient Watershed Permit reissuance in 2019. The Regional Water Board is expected to issue a Letter of Intent specifying that the next Watershed Permit will not include any nutrient load caps, but will require a large increase in funding for the science program. Their intention is that with the increased funding rate, there will be enough scientific clarity to inform management actions that will be reflected in the 2024 permit reissuance.

Nutrient Watershed Permit:

http://www.waterboards.c a.gov/sanfranciscobay/bo ard\_decisions/adopted\_or ders/2014/R2-2014-0014.pdf

Optimization/Upgrade Scoping and Evaluation Plan:

http://bacwa.org/wpcontent/uploads/2015/05/ BACWA\_ScopingEvalPla n\_Final.pdf

BACWA Nutrient Annual Reports:

http://bacwa.org/documen t-category/nutrientannual-reports/

June 7, 2017 Optimization/Upgrade Workshop Materials: https://bacwa.org/docume nt-category/optimizationand-upgrade-studiesworkshop-2/

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CHLORINE RESIDUAL COMPLIANCE	:		
<ul> <li>The Basin Plan chlorine residual effluent limit is 0.0 mg/L. Chlorine residual is the most frequent parameter for violations for Region 2 POTWs, however, because there are 24 hourly reporting events each day, the "opportunities" for violations are enormous. However, the actual violation rates are infinitesimal (~0.001%).</li> <li>Agencies are overdosing their effluent with the dechlorination agent, sodium bisulfite, to prevent chlorine violations, a practice which costs more than \$3 million regionally each year.</li> </ul>	<ul> <li>The Regional Water Board has agreed to work with BACWA to develop a Basin Plan amendment. BACWA plans to retain consultant support for this effort.</li> <li>A draft Scope of Work provided by EOA includes an analysis that will consider the compliance impacts of the following alternatives:         <ul> <li>Increasing bacterial limits</li> <li>Adopting EPA Ambient Water Quality Criteria for chlorine</li> <li>Establishing a Minimum Level for online continuous monitoring system</li> </ul> </li> <li>Several agencies have participated in a WERF study to look at peracetic acid as an alternative disinfectant. Oro Loma Sanitary District is running a pilot study in September 2017.</li> </ul>	<ul> <li>Work with the consultant and Regional Water Board to finalize the Scope of Work to support the Basin Plan Amendment.</li> <li>Execute contract for support, and proceed with tasks.</li> <li>Volunteer for studies to support Basin Plan Amendment.</li> </ul>	
PESTICIDES			
<ul> <li>Pesticides are regulated via FIFRA, and not the Clean Water Act.     POTWs do not have the authority to regulate pesticide use in their service area, but may be responsible for pesticide impacts to their treatment processes or to surface water.</li> <li>Through BAPPG, BACWA aims to proactively support a scientifically sound pesticide management program that will not impact POTWs' primary functions of collecting and treating wastewater, recycling water, and managing biosolids.</li> </ul>	<ul> <li>In 2016 and 2017, EPA has been reviewing the registration of several key pesticides, a task it conducts once about every 15 years.</li> <li>BACWA has funded consultant support to write comment letters advocating for the consideration of POTW and surface water issues during EPA's risk assessments as part of reregistration.</li> <li>With chronic toxicity limits likely in the near term, POTWs will be in compliance jeopardy if pesticides contribute to toxicity.</li> </ul>	Continue to comment on pesticide reregistrations.	BACWA Pesticides Regulatory Update and Call to action: https://bacwa.org/wp- content/uploads/2016/02/ BACWA-Pesticide- Regulatory-Update-2016- 1.pdf  BACWA Comment Letters: https://bacwa.org/docume nt-category/comment- letters/

## MERCURY/PCB WATERSHED PERMIT

- Mercury/PCB Watershed Permit adopted on 12/12/12 with 1/1/13 effective date. The Watershed Permit is based on the TMDLs for each of these pollutants.
- Aggregate PCB and mercury loads have been well below waste load allocations through 2016.
- Method 1668C for measuring PCB congeners has not been promulgated by EPA. Data collected during the first permit term varied widely depending on which laboratory performed the analyses. BACWA Laboratory Committee developed an updated PCB Protocol to reduce variability between laboratories running Method 1668C, effective January 1, 2014. Data have been more consistent since the distribution of this document.
- The permit requires continued risk reduction program funding and annual reporting of effort (BACWA submits letter). In 2015, BACWA issued an RFP for community-based organizations to conduct risk reduction work. Two \$25,000 grants were awarded to APA Family Support Services and the California Indian Environmental Alliance. BACWA held a joint progress meeting with these two entities and the Regional Water Board on October 25, 2016.
- Administrative Draft of 2017
   Watershed Permit reissuance was
   circulated to BACWA members.
   BACWA provided informal comments
   on the PCB congener monitoring
   frequency, as well as the risk
   reduction requirements.
- Tentative Order for 2017 Watershed Permit Reissuance was posted on September 8. The Tentative Order reduces monitoring frequencies via Method 1668C for agencies with design flows of less than 50 mgd.

- Comment on Tentative Order by October 13.
- Complete risk reduction activities from current permits in 2017.
- Plan how to fulfil risk reduction requirements in next permit term.

2012 Mercury/PCB Watershed Permit: http://www.waterboards.c a.gov/sanfranciscobay/bo ard\_decisions/adopted\_or ders/2012/R2-2012-0096.pdf

Tentative Order for 2017 Watershed Permit: http://www.waterboards.c a.gov/sanfranciscobay/bo ard\_info/agendas/2017/N ovember/MunIndust/Hg %20PCBs\_Watershed\_P ermit.pdf

Risk Reduction Materials: https://bacwa.org/mercury pcb-risk-reductionmaterials/

Updated BACWA PCBs Protocol: https://bacwa.org/wpcontent/uploads/2014/02/ PCBs-Sampling-Analysisand-Reporting-Protocols-Dec13.pdf

#### STATE WATER BOARD TOXICITY PROVISIONS

- Draft State Toxicity Policy issued in April 2017 would establish/require: o numeric limits for chronic toxicity;
  - use of Test of Significant Toxicity (TST) as statistical method to determine toxicity replacing EC25/IC25 (with concerns it will lead to more false positive results);
  - Regional Water Board discretion on inclusion of acute toxicity in permits.
- During individual permit reissuances, the Regional Water Board has been performing RPAs for chronic toxicity and giving chronic toxicity limits to agencies with Reasonable Potential.

- BACWA representatives have met with Regional Water Board Staff to discuss the Region 2 implementation of acute toxicity testing and instream waste concentrations.
- BACWA has joined with POTWs throughout the State and CASA to provide informal comments to the State Water Board
- BACWA has joined SCAP, CVCWA and NACWA in a lawsuit alleging EPA did not follow proper procedure in requiring use of the TST.
- BACWA will comment on the next draft of the Toxicity Plan once it is released (expected November 2017).
- · Kev issues for BACWA to discuss with the State Water Board continue to be the enforceable limits, monitoring frequency, reasonable potential analysis methodology, sensitive species screening requirements, and instream waste concentration.
- Host a workshop on toxicity for BACWA members on September 18.

State Board Toxicity Page:

http://www.swrcb.ca.gov/ water issues/programs/st ate implementation polic v/tx ass cntrl.shtml

2017 Draft Toxicity Provisions:

https://bacwa.org/wpcontent/uploads/2017/04/ Toxicity-Provisions-Staff-Draft.pdf

## **COMPOUNDS OF EMERGING CONCERN**

- Pharmaceuticals and other trace compounds of emerging concern (CECs) are ubiquitous in wastewater at low concentrations and have unknown effects on aquatic organisms.
- The State Water Board is developing a Pilot CECs Monitoring Plan for the State.
- Region 2's CEC strategy focuses on monitoring/tracking concentrations of constituents with high occurrence and high potential toxicity and source control. Much of what the State Water Board is considering for its Pilot Monitoring Plan is already being implemented in Region 2 through the RMP.
- BACWA submitted a letter to the State Water Board urging them to work through the RMP's existing CECs program when developing a Statewide CECs Monitoring Plan.
- The Regional Water Board has stated that voluntary participation in RMP CECs studies is key to avoiding State mandates for CECs monitoring. These studies are be for informational and not for compliance purposes. BACWA has provided RMP with a list of POTW volunteers.
- The RMP is currently engaged in a study on microplastics, and was able to obtain adequate POTW participation from the BACWA community.

 Continue to participate in the RMP CEC Workgroup and solicit agency volunteers for future studies.

Regional Monitoring Program CEC Workgroup: http://www.sfei.org/rmp/ec wg#tab-1-4

**SFEI Microplastics** Science Strategy: http://www.sfei.org/docum ents/microplasticmonitoring-and-sciencestrategy-san-franciscobay

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
ELAP UPDATE			
<ul> <li>In August 2015, the State Water Board contracted with Southern California Coastal Water Research Project to establish and facilitate an Expert Review Panel to conduct an examination of ELAP, California's laboratory certification body.</li> <li>The Expert Review Panel concluded that ELAP's current regulations are inadequate. The Panel recommended that ELAP adopt the laboratory standard established by The NELAC Institute (TNI) as the most viable option for California.</li> <li>The Environmental Laboratory Technical Advisory Committee (ELTAC) was established to assist ELAP in technical matters that impact the laboratory community. The committee is composed of representatives from the laboratory community and data users, and have represented the POTW laboratory community during this process.</li> </ul>	<ul> <li>Preliminary Draft Regulations that included adopting the TNI standard for laboratories were released for public comment on</li> <li>Adopting TNI standards will pose a challenge since there are more than 1000 individual requirements in the full document. Initial costs may include         <ul> <li>hiring staff to handle TNI-related paperwork;</li> <li>hiring consultants to setup the TNI documentation framework;</li> <li>purchasing Laboratory Information Management System (LIMS) software;</li> <li>purchasing documents and training material from TNI, etc.</li> </ul> </li> <li>The new standards could be a particular burden on small municipal laboratories, which may choose to close if they cannot economically meet the new standards.</li> <li>BACWA worked with CASA and CWEA, and signed onto CWEA's comment letter on the preliminary draft regulations.</li> </ul>	Comment on draft regulations, expected release date: November 2017.  Work with Regional Water Board on permit language that could reduce documentation burden for smaller agencies once the TNI standards are adopted.	State Water Board's ELAP page: http://www.waterboards.c a.gov/drinking_water/certic/labs/elap_regulations.s html  CWEA Comment letter: http://cweawaternews.org/cwea-submits-comment-letter-on-elap-preliminary-draft-regulations/  CASA Comment Letter: https://bacwa.org/document/casa-comments-preliminary-draft-elap-regulations-09-06-17/

## **CLIMATE CHANGE MITIGATION**

- The AB 32 Scoping Plan lays out the approach for the State to meet its greenhouse gas (GHG) emissions reduction targets through 2020 and goals through 2050. The proposed Draft 2030 Target Scoping Plan Update was released in January 2017 for public comment.
- The 2030 Target Scoping Plan Update states additional policies are needed to achieve GHG levels 40% below 1990 levels by 2030, addressing:
  - Short-lived climate pollutants (i.e., methane)
  - Carbon sequestration on Natural and Working Lands
  - Largest emitters
     (transportation, electricity, and industrial sectors)
- SB 1383 (Short-Lived Climate Pollutant Reduction) calls for:
  - 40% methane reduction by 2030
  - 75% diversion of organic waste from landfills by 2025
  - Policy development encouraging production/use of biogas
- BAAQMD developed a Clean Air Plan that requires GHG emissions reduction on track with CARB's 2030 and 2050 targets.

- CARB states POTWs are part of the solution for reducing methane, and encourages diversion of organics to POTWs to use excess digester capacity and produce biogas for use as transportation fuel. However, diversion also includes biosolids used as ADC.
- Many POTWs are exploring energy generation, but toxic air emissions regulations make waste to energy programs more expensive. Direct injection of biogas to PG&E's pipelines or use as a transportation fuel for a fleet vehicles may be more efficient.
- CARB aims to develop nitrous oxide emission estimates and/or emission factors for landfills, golf courses, and POTWs. Their research plan identified oxidation ditches as a typical treatment process. To correct this, CASA has collected information on treatment processes used throughout California and is analyzing the data to inform CARB's 2017 state inventory.
- BACWA submitted comments on BAAQMD's Draft Clean Air Plan March 9<sup>th</sup>. The final Clean Air Plan was adopted April 19th.

- Work with CASA to look for opportunities for POTWs to help the State meet GHG reduction goals.
- Look for opportunities to inform BAAQMD on the opportunities and challenges for climate change mitigation by Bay Area POTWs.
- Work with PG&E and BAAQMD to explore options for POTWs to inject biogas into PG&E pipelines when an agency is interested in pursuing this option.

AB 32 Scoping Plan: https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm

CARB proposed Short Lived Climate Pollutant Reduction Strategy: <a href="https://www.arb.ca.gov/cc/shortlived/meetings/0314">https://www.arb.ca.gov/cc/shortlived/meetings/0314</a> 2017/final slcp report.pdf

SB 1383: http://www.leginfo.ca.gov/ pub/15-16/bill/sen/sb\_1351-1400/sb\_1383\_bill\_20160 919\_chaptered.htm

BAAQMD Clean Air Plan Measures: http://www.baaqmd.gov/pl ans-and-climate/airquality-plans/currentplans

Clean Air Plan: https://bacwa.org/wpcontent/uploads/2017/03/ COMMENT-LETTER-ON-BAAQMD-DRAFT-2017-CLEAN-AIR-PLAN-3-9-17.pdf

BACWA Comments on

### **BAAQMD Rule 11-18**

- Draft Regulation 11, Rule 18 (Rule 11-18) is BAAQMD's effort to protect public health from toxic air pollution from existing facilities such as POTWs.
- Per the Draft Rule, BAAQMD will use toxic emissions inventories and proximity to the nearest receptor (residents or offsite workers) to conduct site-specific Health Risk Screening Analyses (HRSA). From these HRSAs. BAAQMD will determine each facility's prioritization score (PS). BAAQMD will conduct Health Risk Assessments (HRAs) for all facilities with a cancer PS>10 or non-cancer PS >1.0. After verifying the model inputs, if the facility still has PS above that threshold, that facility would need to implement a Risk Reduction Plan that may include employing Best Available Retrofit Control Technology for Toxics (TBARCT).
- BACWA developed a White Paper on the Rule to describe its potential impacts on the POTW community.
- In response to a request by BAAQMD, the AIR Committee delivered a letter report summarizing specific challenges that POTWs would face in complying with the rule due to budgeting and planning constraints related to being public agencies.
- In response, BAAQMD moved all POTWs to Phase 2 to give sufficient time to update the models inputs, and plan for emissions reduction or TBARCT, as needed. Phase 2 begins in 2019 with the development of HRAs for facilities with a cancer PS>10 or non-cancer PS>1.0.

- AIR Committee is gathering data on proximity factors from each facility to submit to BAAQMD.
- Comment on Proposed Rule by October 16.
- BAAQMD staff is currently on schedule to bring Rule 11-18 to their Board for consideration on November 15, 2017.

BAAQMD Rule 11-18 page:

http://www.baaqmd.gov/rules-and-compliance/ruledevelopment/rules-underdevelopment/regulation-11-rule-18

Rule 11-18 Process Flowchart: https://bacwa.org/doi

https://bacwa.org/docume nt/baaqmd-11-18process-flowchart-08-17-17/

BACWA Letter on POTW impacts:

https://bacwa.org/wpcontent/uploads/2017/04/ BACWA-AIR-Letter-Report-To-BAAQMD-04-04-17-1.pdf

BACWA White Paper:

https://bacwa.org/wpcontent/uploads/2017/01/ 11-18-White-Paper\_final-2.pdf

Policy. One of the anticipated changes to both documents is a reduction in priority pollutant

monitoring.

"Parking lot" issues with no updates can be found in previous **BACWA** issues summaries.

## **ACRONYMS**

ADC Alternate Daily Cover

BAAQMD Bay Area Air Quality Management District

CARB California Air Resources Board

CASA California Association of Sanitation Agencies

CEC Compound of Emerging Concern

CIWQS California Integrated Water Quality System
CVCWA Central Valley Clean Water Agencies
CWEA California Water Environment Association

EC25/IC25 25% Effect Concentration/25% Inhibition Concentration ELAP Environmental Laboratory Accreditation Program

ELTAC Environmental Laboratory Technical Advisory Committee

EPA United States Environmental Protection Agency FIFRA Federal Insecticide, Fungicide, and Rodenticide Act

FY Fiscal Year GHG Greenhouse Gas

HRSA Health Risk Screening Analyses

HRA Health Risk Assessment

LACSD Los Angeles County Sanitation Districts
NACWA National Association of Clean Water Agencies

NELAC National Environmental Laboratory Accreditation Conference

PCB Polychlorinated Biphenyl

POTW Publically Owned Treatment Works

PS Prioritization Score
RFP Request for Proposals
RMP Regional Monitoring Program

SCAP Southern California Alliance of POTWs

SCCWRP Southern California Coastal Water Research Project

SIU Significant Industrial User

SF Bay San Francisco Bay

SFEI San Francisco Estuary Institute
TMDL Total Maximum Daily Load
TNI The NELAC Institute

TST Test of Significant Toxicity