

KEY REGULATORY ISSUE SUMMARY Updated October 20, 2021

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

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Background Highlights Challenges and Recent Updates Next Steps for BACWA Links/Resources **NUTRIENTS IN SAN FRANCISCO BAY** BACWA Nutrients Page: San Francisco Bay receives some For FY22, BACWA is contributing BACWA and the Regional of the highest nitrogen loads among https://bacwa.org/nutrient \$2.2M to fund scientific research Water Board are discussing the estuaries worldwide, yet has not needed to make management possibility of an extension of the s/ historically experienced the water decisions for the third Watershed current permit term to increase quality problems typical of other Permit. This level of funding is scientific certainty prior to SFEI Nutrient Science nutrient-enriched estuaries. It is not required by the second Watershed making management decisions. Plan Documents: • Continue to participate in http://sfbaynutrients.sfei.o known whether this level of nitrogen Permit. loading, which will continue to rg/books/reports-andsteering committee, Nutrient The focus of current scientific efforts work-products increase in proportion to human is improving model representation Management Strategy, Nutrient population increase, is sustainable of biogeochemistry, light Technical Workgroup, and over the long term. attenuation, dissolved oxygen, and planning subcommittee • Because of the complexity of the Harmful Algal Bloom dynamics. meetings, and provide funding science behind nutrient impacts in Field and lab observations are for scientific studies. SF Bay, stakeholders in the region supporting these improvements. · Continue to engage with are participating in a steering • The science team is developing an Nutrient Technical Team and committee to prioritize scientific Assessment Framework for deep **BACWA's Nutrient** studies and ensure that all science subtidal habitats and Lower South Management Strategy technical to be used for policy decisions is Bay sloughs. consultant, Mike Connor, to conducted under one umbrella. provide review of recent work • The science team is assessing the geographic zone of influence of products and charge questions each plant's discharge, which will for the science team. aid in developing management approaches.

SF BAY NUTRIENT WATERSHED PERMIT

- The 1st Nutrient Watershed Permit was adopted in 2014, and required a regional study on Nutrient Treatment by Optimization and Upgrades, completed in 2018.
- The 2nd Nutrient Watershed Permit was adopted in 2019. It includes:
- Continued individual POTW nutrient monitoring and reporting;
- o Continued group annual reporting;
- Significantly increased funding for science:
- Regional assessment of the feasibility and cost for reducing nutrients through nature-based systems and recycled water;
- Establishing current performance for TIN, and "load targets" for nutrient loads based on 2014 to 2017 load data plus a 15% buffer for growth and variability
- Recognition of "early actors" who are planning projects that will substantially decrease TIN loads.
- Through the nutrient surcharge levied on permittees, BACWA funds compliance with the following provisions on behalf of its members:
- Group Annual Reporting
- Regional Studies on Nature-Based Systems and Recycled Water
- Support of scientific studies through the Regional Monitoring Program (RMP) at \$2.2M per year through the five-year permit term.

- Studies related to Recycled Water and Nature-Based Systems are underway, and will be completed by the due date of July 1, 2023.
- Each year by February 1, BACWA submits a Group Annual Report on behalf of its members. The report summarizes trends in nutrient concentrations and loading for each agency, and for all the agencies as a whole. The annual reporting period in the 2nd Watershed Permit is based on a water year (October 1 – September 30th).
- Each year by February 1, BACWA and SFEI submit an annual science implementation plan and schedule update, as required by the 2nd Watershed Permit.
- Agencies with plans to substantially reduce nutrients are recognized in the Fact Sheet of the 2nd watershed permit.

- Agencies continue to report nutrient monitoring to the Water Boards through CIWQS and to BACWA via the data sheet. Submittals for the 2020-21 water year are due to HDR by November 19th.
- Agencies with plans to implement projects that will substantially reduce nutrient loads should keep the Regional Water Board and BACWA apprised, to get credit for "early actions."
- Review draft reports by HDR and SFEI for the Nutrient Removal by Recycled Water Evaluation and the Nature-Based Systems study. Draft agency reports for the Recycled Water Evaluation will start being distributed for agency review in October 2021.
- Continue working with HDR to develop compliance feasibility information related to load limits in the 3rd Watershed Permit.
- Continue discussions about development of a potential nutrient trading framework.
- BACWA has reconvened the Nutrient Strategy Team (NST) that will negotiate with the Regional Water Board to develop the tenets for the 3rd Watershed Permit.

2nd Nutrient Watershed Permit:

https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2019/May/6_ssr.pdf

Special Studies of Recycled Water and Nature-Based Systems: https://bacwa.org/docume nt-category/2ndwatershed-permit-studies/

Optimization/Upgrade Study Information: https://bacwa.org/docume nt-category/optimizationand-upgrade-studies/

BACWA Group Nutrient Annual Reports: http://bacwa.org/documen t-category/nutrientannual-reports/

Data sheet for 2020-21 Group Annual Report: https://bacwa.org/wpcontent/uploads/2021/10/ BACWA_RFI_GAR_Rev2 2021-2020.xlsx

CHLORINE RESIDUAL COMPLIANCE

- 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. Because there are 24 hourly reporting events each day, the "opportunities" for violations are enormous. However, the actual violation rates are infinitesimal (~0.001%).
- Agencies are overdosing their effluent with the dechlorination agent, sodium bisulfite, to prevent chlorine violations, a practice which costs more than \$1 million regionally each year.

- The Regional Water Board worked with BACWA to develop a Basin Plan Amendment (BPA) modifying the effluent limit for chlorine residual.
- The BPA includes:
- A 0.013 mg/L Water Quality
 Objective in marine and estuarine waters, which will be applied as a WQBEL in permits and calculated incorporating dilution. The WQBEL will be applied as a one-hour average.
- A Minimum Level (ML), or Reporting Limit of 0.05 mg/L for online continuous monitoring system.
- The BPA was adopted by the Regional Water Board on November 18, 2020, and was approved by the State Water Board on May 18, 2021. It will not go into effect until it is approved by the Office of Administrative Law (OAL) and EPA, which is expected by late 2021.
- In October 2021, the Regional Water Board adopted a blanket permit amendment (Order R2-2021-0019) implementing the Basin Plan Amendment within each individual NPDES permit. The order will become effective shortly after the Basin Plan Amendment is approved by the OAL and EPA.

- Prepare for a short turnaround time for implementation of the new chlorine residual limits, as follows:
 - Ensure compliance with the new minimum required frequency of once every 5 minutes.
 - Ensure the monitoring system complies with the new minimum level of 0.05 mg/L.
 - Members that plan to discharge detectable residual chlorine may need to adapt sampling and analysis procedures for other constituents for which residual chlorine could interfere, such as whole effluent toxicity and ammonia.
 - Use the highest one-hour arithmetic mean as the daily value reported into CIWQS.

Background and Status information about BPA on Regional Water Board site:

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/amendments/chlorinebpa.html

Final BPA adopted by Regional Water Board https://www.waterboards. ca.gov/sanfranciscobay// water_issues/programs/pl anningtmdls/amendments /chlorinebpa/2_Chlorine_ Resolution_R2-2020-0031.pdf

Blanket Permit Amendment (Revised Tentative Order) https://www.waterboards. ca.gov/sanfranciscobay/b oard_decisions/adopted_ orders/2021/R2-2021-0019.pdf

BACWA Comment Letter on blanket permit amendment:
https://bacwa.org/wp-content/uploads/2021/09/BACWA-Chlorine-Amend-TO-Comment-Ltr-2021-08-20.pdf

PESTICIDES

- 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.
- Through BAPPG, BACWA aims to proactively support a scientific and regulatory advocacy program so that pesticides will not impact POTWs' primary functions of collecting and treating wastewater, recycling water, and managing biosolids, or impact receiving waters via the "down the drain" route.
- EPA reviews all registered pesticides at least once every 15 years. Each review allows opportunity for public comment.
- BACWA continues to fund 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. Funding for pesticide regulatory outreach in FY22 is \$60K.
- The Regional Water Board leverages BACWA's efforts to provide their own comment letters to EPA.
- With chronic toxicity limits likely in the near term, POTWs will be in compliance jeopardy if pesticides contribute to toxicity.
- Baywise.org has launched webpages on flea and tick control messaging to pet owners and veterinarians.

- Continue to comment on pesticide re-registrations.
- Work with veterinary associations on messaging with respect to flea and tick control alternatives.
- Continue to develop summary of EPA actions on pesticides.
- Look for opportunities to work with CalDPR on pesticides research.
- Work with other regional associations, such as the California Stormwater Quality Association (CASQA), to collaborate on funding pesticide regulatory outreach.

BACWA Pesticides Regulatory Update and Call to action:

https://bacwa.org/wpcontent/uploads/2016/02/ BACWA-Pesticide-Regulatory-Update-2016-1.pdf

BACWA Pesticide Regulatory Support Page: https://bacwa.org/docume nt-category/pesticidesregulatory-support/

Baywise flea and tick pages: https://baywise.org/

ENTEROCOCCUS LIMITS

- In 2019, new statewide water quality objectives for bacteria were implemented to protect recreational users. The objectives are now part 3 of the Water Quality Control Plan for the SIP and Ocean Plan.
- In February 2021, the Regional Water Board amended the Basin Plan to reflect the new statewide objectives. The same order also established a bacteria TMDL for two beaches in the Half Moon Bay area.
- The new enterococcus objective for saline waters is a six-week rolling geometric mean not to exceed 30 CFU/100 mL and a statistical threshold value of 110 CFU/100 mL
- In July 2021, the State Water Board approved the Basin Plan Amendment and TMDL. The action must now be approved by the OAL and EPA, though the water quality objectives are already in effect. OAL review commenced on Oct. 1, 2021.
- Dischargers may request dilution credits when the new objective is implemented within NPDES permits, based on a study completed by BACWA and SFEI to establish background enterococcus levels in SF Bay.
- The study, completed in June 2020, showed all stations in the Bay were below the objective of 30 CFU/100 mL

SFEI Report on Enterococci in SF Bay: https://bacwa.org/wpcontent/uploads/2020/08/BA CWA-2020_Enterococcireport_final.pdf

Regional Water Board Basin Plan Amendment: https://www.waterboards.ca. gov/sanfranciscobay/water_i ssues/programs/TMDLs/PP H_TMDL.html

MERCURY AND PCBS

- The Mercury & PCB Watershed Permit was reissued in November 2017 with an effective date of January 1, 2018. 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 2020, the last year for which data have been compiled.
- 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.
- In 2017, EPA adopted federal pretreatment program rules requiring dental offices to install dental amalgam separators. The rule is intended to reduce dental office discharge of mercury. The compliance date was July 14, 2020.

- The 2017 watershed permit reduces monitoring frequencies via Method 1668C for agencies with design flows of less than 50 MGD. It also incorporates the laboratory guidance from the BACWA PCB Protocol.
- The permit requires continued risk reduction program funding. For FY22, BACWA granted an extension to an ongoing contract worth \$12,500 to the California Indian Environmental Alliance to conduct risk reduction activities related to fish consumption. A previous contract for APA Family Support Services is now complete.
- In 2016, monitoring requirements for PCBs were modified for some agencies per Order No. R2-2016-0008, the Alternate Monitoring and Reporting Requirements Order. New changes to mercury monitoring are expected when this 2016 Order is replaced (see CECs page).
- As part of the 2021 Triennial Review of the Basin Plan, the Regional Water Board has prioritized designation of three new beneficial uses: Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (TSUB) and Subsistence Fishing (SUB). Water bodies designated these beneficial uses could also be assigned lower mercury objectives. In Sep. 2021, this basin planning project was ranked as a "high priority" in the Triennial Review.

- Synthesize PCB loading data analyzed via Method 1668C ahead of the 2022 reissuance of the PCB & Mercury Watershed Permit. This large data set demonstrates compliance with the TMDL, but may also be useful in assessing necessary monitoring frequencies. Continue to work with Regional Water Board staff to develop appropriate mercury and PCB monitoring requirements (as well as other constituents) when replacing the 2016 Alternate Monitoring and Reporting Requirements Order.
- Continue outreach to dentists BAPPG and BACWA's pretreatment committee. Under the federal pretreatment program, all dental facilities were required to submit onetime compliance reports by October 2020.
- Schedule risk reduction presentations by the grantees to the Regional Water Board in 2021.
- Track potential Basin Plan
 Amendments resulting from the
 Triennial Review project related
 to new beneficial use
 designations. The new
 designations are not expected
 to impact the bay-wide mercury
 TMDL in the near term, but
 there could be localized or
 longer-term impacts.

2017 Mercury/PCB Watershed Permit: http://www.waterboards.c a.gov/sanfranciscobay/bo ard_decisions/adopted_or ders/2012/R2-2012-0096.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

One-Time Compliance Report for Dental Offices: https://www.waterboards. ca.gov/water_issues/prog rams/npdes/docs/drinking water/one-time_compl iance_report_for_dental_offices.pdf

STATE WATER BOARD TOXICITY PROVISIONS

- The State Water Board has been working since before 2012 to establish Toxicity Provisions in the SIP that would introduce uniform Whole Effluent Toxicity Requirements for the State
- During individual permit reissuances since 2015, the Regional Water Board has been performing RPAs for chronic toxicity and giving chronic toxicity limits to agencies with Reasonable Potential.
- Proposed Final Statewide Toxicity Provisions were released in October 2020, incorporating revisions to previous versions from 2018 to 2020. The Provisions establish:
 - 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):
 - Numeric limits for chronic toxicity for POTWs >5 MGD and with a pretreatment program; smaller POTWs would receive effluent targets and only receive limits if Reasonable Potential is established:
 - Regional Water Board discretion on whether to require RPAs for acute toxicity:
 - o For POTWs with Ceriodaphnia dubia as most sensitive species, numeric targets rather than limits until after completion of state-wide study on lab/ testing issues (Dec. 31, 2023).

 The State Water Board first adopted the Statewide Toxicity Provisions at its December 2020 meeting. In October 2021, the State Water Board affirmed that the Statewide Toxicity Provisions were adopted as state policy for water quality control for all inland surface waters and estuaries. The Toxicity Provisions are expected to go into effect in early 2022 after approval by OAL and EPA.

Challenges and Recent Updates

- Implementation is likely to be on a permit-by-permit basis as new individual NPDES permits are issued.
- Since 2016, agencies have had the option to skip sensitive species screening upon permit reissuance and pay the avoided funds to the RMP to be used for CECs studies. Once the Statewide Toxicity Provisions come into effect, agencies will once again be required by the provisions to do sensitive species screening once every 15 years.
- BACWA joined SCAP, CVCWA and NACWA in a lawsuit alleging EPA did not follow proper procedure in requiring use of the TST, which has not been officially promulgated. The lawsuit was dismissed on Statute of Limitation grounds. An appeal to the 9th Circuit Court of Appeals was denied in September 2021 on the basis that the EPA guidance document is not a final agency action that can be reviewed by the courts. POTWs' only recourse is to challenge individual permits that include the procedure.

- Continue to work with Regional Water Board on language for implementing **Toxicity Provisions in Region** 2 NPDES Permits.
- · Regional Water Board staff presented draft permit language to the BACWA Permits Committee at its December 2020 meeting, and BACWA subsequently provided written feedback. A modified draft will be circulated for BACWA member review in the coming months. The sample permit language will ultimately be copied into each newly adopted permit in the region, filling in details about monitoring and screening requirements that the Provisions leave to Regional Water Board discretion.
- · Share information on the special study on the Ceriodaphnia dubia test method with agencies who have that species in their permits.
- Develop an alternative funding mechanism for RMP CECs studies by seeking reduced monitoring for items other than chronic toxicity screening. A draft plan to replace the 2016 Alternate Monitoring and Reporting Requirements Order is under development by **BACWA** and Regional Water Board staff (see CECs page).

SWRCB Toxicity Page: http://www.swrcb.ca.gov/ water issues/programs/st ate_implementation_polic y/tx ass cntrl.shtml

Toxicity Provisions adopted December 2020: https://www.waterboards. ca.gov/water issues/prog rams/state implementatio n policy/docs/provisions final.pdf

Toxicity Workshop Presentations from 2017 BACWA Workshop: https://bacwa.org/bacwatoxicity-workshopseptember-18-2017/

Regional Water Board presentation on implementation of Statewide Toxicity Provisions from December 2020 https://bacwa.org/wpcontent/uploads/2021/01/ Slides-from-RWQCB-Regarding-R2-Tox-Language-in-NPDES-Permits-2020-12-08.pdf

COMPOUNDS OF EMERGING CONCERN (CECS)

- 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 considering 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. Much of what the State Water Board is considering for its Pilot Monitoring Plan is already being implemented in Region 2 through the RMP.
- The Regional Water Board has stated that voluntary and representative participation in RMP CECs studies is key to avoiding regulatory mandates for CECs monitoring. These studies are informational and not for compliance purposes. BACWA developed a White Paper on representative participation to be used to support facility selection for these studies. It is intended to be a living document with ongoing updates
- Microplastics have been a focus of the RMP in recent years. BACWA has participated in the Workgroup and developed a POTW Fact Sheet. One conclusion of the RMP work is that POTWs contribute much lower microplastic loads than stormwater.
- DDW has adopted a definition of Microplastics in Drinking Water (may apply to other matrices such as wastewater and stormwater in the future).
- The OPC is funding a study in 2021 that will look at microplastic removal through wastewater treatment processes. The study will be carried out by SCCWRP and SFEI, and will commence with a pilot study in summer 2021 and full-scale sampling of about 15 facilities in Fall 2021.

- Provide comments on the Tentative Order NPDES permit amendment requiring supplemental funding of RMP CECs studies. The Tentative Order will be considered for adoption at the December 15th Regional Water Board hearing. The Tentative Order will provide a sustainable source of RMP CEC funding in exchange for reduced monitoring and reporting of other parameters. For most dischargers, it will replace a similar 2016 Order.
- Continue to participate in the RMP CEC Workgroup.
- Participate in studies by collecting wastewater samples at member facilities. Studies this year will include ethoxylated surfactants follow-up, sunscreens, and the OPCfunded microplastic study.
- Provide ongoing updates to White Paper for use by the RMP in selecting representative POTWs for participation in CEC studies, and develop a proposal for ongoing monitoring.
- Continue tracking State Water Board and Ocean Protection Council actions re: microplastics via the CASA Microplastics Workgroup..

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

BACWA CECs White Paper:

https://bacwa.org/docume nt/bacwa-cec-whitepaper-updated-june-2020/

BACWA Microplastics Fact Sheet: https://bacwa.org/wpcontent/uploads/2019/09/ BACWA-Microplasticsflyer.pdf

SFEI Microplastics Science Strategy: www.sfei.org/documents/ microplastic-monitoringand-science-strategy-sanfrancisco-bay

SWRCB Microplastics in Drinking Water page: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/microplastics.html

Tentative Order NPDES
Permit Amendment
https://www.waterboards.
ca.gov/sanfranciscobay/b
oard_info/agendas/2021/
December/AMRP/ARMP
TO.pdf

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

- Per- and polyfluoroalkyl substances made substances (PFAS) are a large group of human-made substances that are very resistant to heat, water, and oil. PFAS have been used extensively in surface coating and protectant formulations; common PFAS-containing products are nonstick cookware, cardboard/paper food packaging, water-resistant clothing, carpets, and fire-fighting foam.
- · Perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are two types of PFAS that are no longer manufactured in the US; however, other types of PFAS are still produced and used in the US.
- All PFAS are persistent in the environment, can accumulate within the human body, and have demonstrated toxicity at relatively low concentrations. PFOA and PFOS were found in the blood of nearly all people tested in several national surveys.
- · Potential regulatory efforts to address PFAS focus on drinking water in order to minimize human ingestion of these chemicals, although regulators have also expressed concern about uptake into food from land applied biosolids.
- In April 2021, the formation of an "EPA Council on PFAS" was announced.

 DDW has developed drinking water notification levels (NLs) and response levels for PFOA, PFOS, and Perfluorobutane Sulfonic Acid (PFBS).

Challenges and Recent Updates

- At DDW's request, OEHHA is developing NLs for seven other PFAS compounds and public health goals (PHGs) for both PFOA and PFOS as the next step in establishing drinking water MCLs.
- In July 2021, OEHHA proposed a PHG of 0.007 ng/L for PFOA and 1 ng/L for PFOS.
- In July 2020, the SWRCB issued an Investigative order for POTWs. Investigative orders have also been issued for landfills, airports, chrome platers, and refineries & bulk terminals. The July 2020 SWRCB investigative Order for POTWs is not applicable to Region 2 agencies.
- · The Summit Partners held four PFAS Workshops for POTWs in late 2020 and 2021. The most recent workshop was in September 2021.
- EPA is beginning pretreatment standards rulemaking for two types of industrial users: Metal Finishing, and Organic Chemicals, Plastics and Synthetic Fibers.
- In September 2021, EPA released Draft Method 1633 for analysis of PFAS in complex matrices like wastewater. In October 2021, state legislation passed banning PFAS in children's products (AB 652) and food packaging (AB 1200).

- BACWA worked with RWB staff and obtained State Water Board approval to fund and conduct a Regional PFAS Study in lieu of the statewide investigative order.
- SFEI is conducting this study in two phases:
- o In Phase 1, fourteen representative facilities collected samples in Q4 2020 for influent, effluent, RO concentrate, and biosolids. SFEI has uploaded the data into Geotracker and will issue a report in October 2021. BACWA has prepared a Fact Sheet regarding Phase 1 results (see link at right).
- o Phase 2 will be conducted in Winter 2021 and Spring 2022. Preparation of the plan is underway, and is expected to include a subset of Phase 1 facilities sampling at more locations -- including in collection systems.
- BACWA will continue collaboration with Summit Partners and non-governmental organizations on legislation related to pollution prevention, as well as tracking developments at the State and Regional level.

Region 2 PFAS Study Phase 1 Presentation: https://bacwa.org/wpcontent/uploads/2021/09/ Mendez-Miguel-PFAS-Workshop-4.pdf

Region 2 PFAS Study Fact Sheet: https://bacwa.org/wpcontent/uploads/2021/08/ PFAS-Fact-Sheet-Phase-I.pdf

Summit Partners PFAS Workshop presentations: https://casaweb.org/calen dar/speakerpresentations/

SWRCB Investigative Order for POTWs: https://www.waterboards. ca.gov/board decisions/a dopted orders/water qua lity/2020/wgo2020 0015 dwq.pdf

OEHHA Drinking Water: https://oehha.ca.gov/water

EPA PFAS Resources https://www.epa.gov/pfas

EPA PFAS Strategic Roadmap (Oct 2021) https://www.epa.gov/pfas/ pfas-strategic-roadmapepas-commitmentsaction-2021-2024

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SSS WDR REISSUANCE			
 The State Water Board plans to reissue the statewide Sanitary Sewer System General Order (SSS-WDR). State Water Board staff have sought out early stakeholder engagement through outreach to CASA and the Regional Associations, and NGOs. The State Water Board's goals for the update are: Updating the 2006 Order Clarifying compliance expectations and enhancing enforceability Addressing system resiliency, including climate change impacts Identifying valuable data and eliminating non-valuable reporting requirements 	 In February 2021, the State Water Board released an informal staff draft of the updated SSS-WDR. The informal staff draft proposed the following new components: SSMPs must include a detailed risk assessment, with findings to be used for prioritizing remediation actions Spills must be reported to CIWQS within 2 hours Sewershed boundaries must be provided to SWRCB Agencies must report spills from private systems and laterals Exfiltration is included in the definition of a spill Well-performing systems have reduced reporting requirements for "Category 4" SSOs (those less than 50 gallons) Legally Responsible Officials must have a PE license or be a CWEAcertified Grade III collection system operator BACWA worked with CASA to provide proposed redlines to the informal staff draft, and discussed concerns in several meetings with State Water Board staff. BACWA also provided a comment letter on the informal staff draft. A public review draft is expected later in 2021 or early 2022. 	 Review and comment on the public review draft SSS-WDR when available for public comment, expected in December 2021 or January 2022. There will be a 60-day comment period and public workshop during this time. Continue to coordinate with CASA, CVCWA, and SCAP on proposed revisions and reorganization of the SSMP requirements Discuss response to issues such as exfiltration via BACWA's Collection Systems Committee. 	SWB SSS WDR page: https://www.waterboards. ca.gov/water_issues/prog rams/sso/ SWB Informal Staff Draft (February 2021) https://www.waterboards. ca.gov/water_issues/prog rams/sso/docs/workshops /informal_staff_draft_stat ewide_sso_order.pdf BACWA / CASA Comment Letter on Informal Staff Draft: https://bacwa.org/wp- content/uploads/2021/07/ 6-30-21-SSS-WDR- Comment-Letter.pdf BACWA / CASA markup of Informal Staff Draft: https://bacwa.org/wp- content/uploads/2021/07/ 6-30-21-SSS-WDR- Redlines- Submission.docx

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ELAP UPDATE			
 In May 2020, the State Water Board adopted new comprehensive regulations for the Environmental Laboratory Accreditation Program. Adoption of the new regulations was required by AB 1438, legislation that became effective in 2018. The new ELAP regulations will replace the current state-specific accreditation standards with a national laboratory standard established by The NELAC Institute (TNI). 	 The new ELAP regulations became effective as of January 1, 2021. Compliance with TNI standards is required beginning January 1, 2024. Adoption of TNI standards poses a challenge since there are more than 1,000 individual requirements. Setup costs may include: Hiring and/or training staff; Hiring consultants to set up the TNI documentation framework; Purchasing Laboratory Information Management System (LIMS) software; Purchasing documents and training material from TNI, etc. The new standards will be a particular burden on small laboratories, which may choose to close if they cannot economically meet the new standards. ELAP's "Roadmap to ELAP Accreditation" Program is the outreach and training component of the new regulations. ELAP staff have presented to the Lab Committee in June 2020, February 2021, and April 2021. ELAP has contracted with A2LA Workplace Training to provide training sessions. The BACWA Lab Committee is providing a year-long series of monthly TNI training sessions beginning in July 2021. 	 Offer monthly training sessions to BACWA members. The free virtual training sessions are open to BACWA members holding a valid copy of the 2016 TNI Standard, and are occurring on the 3rd Tuesday of each month. Training is provided by Diane Lawver of Quality Assurance Solutions, LLC. Continue to work through BACWA's Laboratory Committee to support members as they navigate laboratory accreditation under the new TNI standards. Publicize training opportunities offered by consultants, ELAP, and others. Provide a forum for BACWA laboratories to share experiences and lessons learned from various approaches to TNI implementation. 	State Water Board's 'Roadmap to ELAP Accreditation' page: https://www.waterboards. ca.gov/drinking_water/cer tlic/labs/roadmap_to_elap accreditation.html Roadmap to Accreditation Presentation to BACWA Lab Committee: https://bacwa.org/wp- content/uploads/2020/06/ California-ELAP- Regulations- BACWA_06092020.pdf State Water Board's ELAP regulations page: http://www.waterboards.c a.gov/drinking_water/certl ic/labs/elap_regulations.s html Monthly Training Session flyer: https://bacwa.org/wp- content/uploads/2021/07/ BACWA-Lab-TNI- Training-Series-Flyer.pdf

PHASE-OUT OF BIOSOLIDS AS ALTERNATIVE DAILY COVER

- Regulatory drivers are indicating that biosolids used as alternative daily cover (ADC) or disposed in landfills will be phased out:
 - AB 341 set a goal to recycle 75% of solid waste by 2020 and CalRecycle's plan to achieve that goal called for a marked, but unquantified, reduction of organics to landfills.
 - o SB 1383, adopted in September 2016 requires organics diversion: -50% by 2020 (relative to 2014) -75% by 2025 (relative to 2014)
 - o In 2020, CalRecycle will count green waste as disposal (per AB 1594), rather than diversion, even when used as ADC.
- Regulations implementing SB 1383 were approved by the OAL on November 9, 2020. The regulation will become effective on January 1, 2022, when states can begin enforcement on jurisdictions. Jurisdictions can begin local enforcement January 1, 2024, and compliance is required by January 1, 2025.
- While the regulations implementing SB 1383 do not explicitly forbid biosolids disposal/reuse in landfills, it is assumed that since biosolids are a relatively "clean" waste stream that can be easily diverted, landfills will stop accepting biosolids.

· Requirements in the final regulations include:

Challenges and Recent Updates

- o Diverted biosolids must be anaerobically digested and/or composted to qualify as landfill reduction.
- o Incineration and surface land disposal sites are designated as "landfills" for accounting purposes.
- o Local ordinances restricting land application are disallowed.
- o Jurisdictions that divert organic waste must also procure the end products of diversion, such as biogas, biomethane, and compost (but not biosolids).
- In March 2020 and May 2021, the California Conference of Directors of Environmental Health (CCDEH) prepared letters expressing concern over the anticipated expansion of land application due to SB 1383, and requesting a moratorium on land application until new safety standards are developed.
- In summer 2021, member agencies provided responses to a biosolids trends survey covering 2018-2020 activities and SB 1383 implementation. BACWA is compiling and reviewing the responses.
- SB 619, signed in October 2021, delays enforcement of SB 1383 on local jurisdictions by one year to January 1, 2023. The extension is not automatic: iurisdictions must request the extension by submitting a Notice of Intent to comply and corrective action plan.

 In Fall 2021, BACWA will release an updated biosolids trends survey report.

Preliminary results indicate members are shifting from ADC towards other uses, compared to the previous 2018 survey

- Actively work through CASA with California Air Resource Board, CalRecycle, State Water Board, and California Department of Food and Agriculture to develop sustainable long-term options for biosolids beneficial use.
- Follow efforts of the Bay Area Biosolids Coalition (BABC) to investigate all-weather options for biosolids management. BABC is a BACWA Project of Special Benefit.
- Follow efforts of the Regional Water Board to revise biosolids permitting requirements for land application and disposal, particularly in the Baylands.
- Participate in BAAQMD's **Organics Recovery Technical** Working Group to educate their staff on implementation of SB 1383 at the Air District level.
- Meet with BAAQMD regularly in 2021 to discuss alignment of state and local regulations.
- Work with CASA and others to respond to CCDEH concerns regarding safety standards for land application (see July 2021 letter, link at right).

BACWA 2018 Biosolids Trends Survey Report: https://bacwa.org/docume nt/2018-biosolids-trendssurvey-report/

CASA White Paper on Biosolids Use in Landfills: https://bacwa.org/wpcontent/uploads/2017/01/ 1-11-17-Sustainability-forbiosolids-use-atlandfills.pdf

BABC website:

http://www.bayareabiosoli ds.com/

CASA White Paper on SB 1383 Implementation: https://bacwa.org/docume nt/summary-of-sb-1383and-its-implementationcasa-2020/

CASA July 2021 Response Letter to CCDEH https://casaweb.org/wpcontent/uploads/2021/07/ CASA-Response-to-CCDEH-Letters-071321.pdf

CLIMATE CHANGE MITIGATION

- CARB's Climate Change Scoping Plan Update lays out the approach for the State to meet its greenhouse gas (GHG) emissions reduction targets through 2030, including additional policies to achieve 40% reduction below 1990 levels by 2030:
 - Short-lived climate pollutants
 - o Carbon sequestration on Natural and Working Lands
- Largest emitters (transportation, electricity, and industrial sectors) The Scoping Plan will be updated in 2022 targeting carbon neutrality by 2045 and, if possible, 2035. Workshops are underway.
- SB 1383 (Short-Lived Climate Pollutant Reduction) calls for:
 - o 40% methane reduction by 2030
 - o 75% diversion of organic waste from landfills by 2025
- Policy / regulatory development encouraging production/use of biogas
- BAAQMD developed a Clean Air Plan requiring GHG emissions supporting CARB's 2050 target.
- BAAQMD has proposed the development of Regulation 13 (climate pollutants) targeting GHG reductions related to organics diversion and management.
- In October 2020, Governor Newsom signed Executive Order N-82-20 calling for nature-based land management strategies to address climate change, such as natural and working lands restoration.

 CARB states POTWs are part of the solution for reducing fugitive methane, and encourages diversion of organics to POTWs to use excess digester capacity and produce biogas. However, diversion also increases biosolids, which also need to be diverted from landfills.

Challenges and Recent Updates

- Many POTWs are exploring energy generation, but BAAQMD TAC regulations could make such programs more difficult to implement. Direct injection of biogas to PG&E's pipelines or use as a transportation fuel may be more efficient.
- Use of biogas as transportation fuel is jeopardized by CARB's proposed Advanced Clean Fleet regulations. which focus on electrification. CASA is engaging on this issue to request continued allowance of biogas as a transportation fuel.
- CARB's previous interest in nitrous oxide emission estimates and/or emission factors for POTWs has shifted to toxic air contaminants. See Toxic Air Contaminants - BAAQMD Rule 11-18, AB 617, and AB 2588.
- BAAQMD is developing a suite of Rules under Regulation 13 for climate pollutants methane and nitrous oxide. However, rule development has been suspended due to COVID-19 and lack of data. The delay is allowing time to summarize information about current best management practices.

- · Review the summary of the AIR committee-led survey regarding current methane management practices at anaerobic digesters and sludge lagoons. After committee review, this summary will be shared with BAAQMD staff.
- For Regulation 13, continue to work with BAAQMD staff to provide information and education about anaerobic digesters and POTW operations. Participate in the **Organics Recovery Technical** Working Group, as well as comment on draft Rules.
- Look for ways to inform BAAQMD on 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. Note: CASA has been discussing the barriers to pipeline injection with CPUC staff, proposing a reduction in their standard from 990 Btu/scf to 970 Btu/scf and supporting a mandatory biomethane procurement program for CA's four large gas IOUs under SB 1440.

Climate Change Scoping Plan, including 2022 Update:

https://ww2.arb.ca.gov/ou r-work/programs/ab-32climate-change-scopingplan

CARB Short Lived Climate Pollutant Reduction Strategy: https://www.arb.ca.gov/cc /shortlived/meetings/0314 2017/final slcp report.pdf

CARB Advanced Clean Fleet Rule: https://ww2.arb.ca.gov/our-

work/programs/advancedclean-fleets/about

SB 1383:

https://www.calrecycle.ca. gov/organics/slcp

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

BAAQMD Regulation 13 http://www.baagmd.gov/r ules-andcompliance/rules/regulati on-13-climate-pollutants

CLIMATE CHANGE ADAPTATION

- In 2017, the State Water Board adopted a Climate Change Resolution addressing mitigation and adaptation. One requirement is Regional Water Boards will make recommendations to modify permits and/or create other regulatory requirements to reduce vulnerability of water and wastewater infrastructure to flooding, storm surges, and sea level rise.
- The Regional Water Board is planning to modify the Basin Plan under its Climate Change and Wetland Policy Update. The changes will occur through multiple Basin Plan amendments.
- Climate change and water resilience continue to be a strategic priority of the Regional Water Board in FY21.
- In April 2019, Governor Newsom signed Executive Order N-10-19 directing State Agencies to recommend a suite of priorities and actions to build a climate-resilient water system and ensure healthy waterways through the 21st century.

• The State Water Board is planning to send a data request to all permitted facilities (collection systems and POTWs) in the State to better understand to what extent agencies are performing climate change vulnerability assessments and/or investing in adaptation measures. They plan to use this information to determine the need for funding assistance or permit requirements for climate change planning.

Challenges and Recent Updates

- The Regional Water Board recently completed a detailed questionnaire of all POTWs in the region in 2021 to collect information about climate vulnerability and adaptation. Results are currently being analyzed by Regional Water Board staff, and will be presented to the Regional Water Board in the coming months.
- The Regional Water Board is developing a Shoreline Resiliency Basin Plan Amendment addressing estuarine wetland protection, living shorelines, beaches, ecotone systems using treated wastewater. A draft is expected in Fall 2021. This Basin Plan Amendment could be used to incentivize the development of wetlands projects by wastewater agencies, and reduce permitting hurdles.

- Review the Shoreline Resiliency Basin Plan
 Amendment when it is released in Fall 2021. This proposed amendment is part of a larger Climate Change and Wetland Policy Update project.
- Compile information about sea level rise projections from responses to the climate change questionnaire, and share this information with BACWA members.
- Continue to coordinate with State Water Board on the status of their data request on climate change planning, so members can provide the information they request as effectively as possible. Survey expected to be released towards the end of 2021.
- Continue to work with Regional Water Board and other resource agencies to look for regulatory solutions to encourage wetlands projects for shoreline resiliency.
- Coordinate with BABC, SFEI and Sonoma Land Trust on preparation of a white paper regarding biosolids management in the Baylands, an important region both for biosolids land application and wetlands restoration (see also Biosolids section, above).

State Water Board 2017 Climate Change Resolution:

https://www.waterboards. ca.gov/board_decisions/a dopted_orders/resolution s/2017/rs2017_0012.pdf

Regional Water board Wetlands Policy Page: https://www.waterboards. ca.gov/sanfranciscobay/water_issues/programs/climate_change/wetland_policies.html

BACWA Comments on Wetlands Policy: https://bacwa.org/wpcontent/uploads/2018/09/ BACWA-comments-Wetland-Policy-9-14-18.pdf

Information about Proposed Basin Plan Amendment (Issue 5.1): https://www.waterboards. ca.gov/sanfranciscobay/b asin_planning.html#trienn ialreview

BACWA Comments on Resilience Portfolio: https://bacwa.org/wpcontent/uploads/2019/10/ BACWA-Water-Resilience-Portfolio-10-01-19.pdf

TOXIC AIR CONTAMINANTS - BAAQMD RULE 11-18, AB 617, AND AB2588

- Regulation 11, Rule 18 (Rule 11-18), adopted November 15, 2017, is BAAQMD's effort to protect public health from toxic air pollution from existing facilities, including POTWs.
- Per the Rule, BAAQMD will conduct site-specific Health Risk Screening Analyses (HRSAs) and 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).
- AB 617 (Community Air Protection Program) – requires CARB to harmonize community air monitoring, reporting, & local emissions reduction programs for air toxics and GHGs). POTWs within communities already impacted by air pollution may have to accelerate implementation of risk reduction measures.
- AB 2588 (Air Toxics "Hot Spots" Program) - Establishes a statewide program for the inventory of air toxics emissions from individual facilities, as well as requirements for risk assessment and public notification of potential health risks. 2020 updates expanded compound list from >500 to >1,000.

 BACWA developed a White Paper on the BAAQMD Rule to describe its potential impacts on the POTW community.

Challenges and Recent Updates

- 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 model's inputs, and plan for emissions reduction or TBARCT, as needed. Phase 2 has been slow to roll out and is now expected to begin in Q4 2021 with data collection and verification, followed by the development of HRAs for facilities with a cancer PS>10 or non-cancer PS>1.0. Implementation of the Rule for Phase 2 facilities will be spread out over two years depending on the PS.
- AIR Committee gathered data on proximity factors from each facility and submitted to BAAQMD for updating prioritization scores, which will be use in HRA development.
- In the Final Statement of Reasons for rulemaking issued in August 2021, CARB provided the wastewater sector time to develop a short-list of relevant compounds and perform a pooled emissions estimating effort to update outdated default emission factors (through 2028).

- Priority: Agencies should use the tool developed by the AIR Committee to address emission contributions from influent flows, which will be used to update emissions inventory values.
- Respond to BAAQMD data request beginning in Q4 2021. There will be a 60-day turnaround to comply with the data request.
- Meet with BAAQMD management more frequently in 2021 to discuss alignment of state and local regulations.
- Report "business as usual" for air toxics through 2028. If BAAQMD requests additional monitoring of air toxics, member agencies should refer to the one-page handout on this topic prepared by CASA. The wastewater sector has until 2028 to perform a statewide "two-step process" in collaboration with CARB and air districts to determine a shortlist of compounds relevant to the wastewater sector to report.

BAAQMD Rule 11-18 page:

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

BAAQMD Prioritization Scores for AB 11-18: https://www.baaqmd.gov/~/ media/files/ab617community-health/facilityrisk-reduction/ documents/implementation-

procedures august 2020-

Rule 11-18 Process Flowchart:

pdf.pdf?la=en

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

CARB page on AB 617 and AB 2588:

https://ww2.arb.ca.gov/ourwork/programs/criteria-andtoxics-reporting Final Statement of Reasons https://ww3.arb.ca.gov/bo ard/15day/ctr/fsor.pdf

CASA One-Page
Handout on Air Toxics
Reporting:
https://casaweb.org/wp-con

https://casaweb.org/wp-con tent/uploads/2021/06/CTR-EICG_CASAOnePageIssue-Approach_June2021.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
BACT FOR STANDBY POWER			
In December 2020, BAAQMD made a determination that diesel back-up engines greater than or equal to 1,000 bhp must meet EPA Tier 4 Emissions Standards under the Best Available Control Technology (BACT) Regulation.	 The determination was made retroactive to January 2020, affecting projects whose applications had been deemed complete at several BACWA member agencies. BAAQMD did not consider reliability under emergency conditions in determining that Tier 4 Emissions Standards were "achieved-in-practice." Some Tier 4-compliant engines have malfunctioned during actual emergencies. 	 Meet with BAAQMD management regularly in 2021 to provide earlier knowledge of new regulations, such as BACT determinations, and encourage a public notification and review process for future BACT determinations. Work with CASA and Regional Associations to encourage consideration of reliability for essential public services in BACT determination being conducted by other Air Boards. 	BAAQMD Program Page: https://www.baaqmd.gov/ permits/permitting- manuals/bact-tbact- workbook BACWA Comment Letter on BACT Determination: https://bacwa.org/docume nt/baaqmd-bact-letter- 2021-02-23/

"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

BACT Best Available Control Technology

BTU/SCF British thermal units per standard cubic foot

CARB California Air Resources Board

CASA California Association of Sanitation Agencies

CAP Criteria Air Pollutant

CEC Compound of Emerging Concern

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

DDW Division of Drinking Water, State Water Resources Control Board

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

MCL Minimum Contaminant Level (Drinking Water)

MGD Million Gallons per Day

NACWA National Association of Clean Water Agencies

NELAC National Environmental Laboratory Accreditation Conference

OAL Office of Administrative Law

OEHHA Office of Environmental Health Hazard Assessment

PCB Polychlorinated Biphenyl

PFAS Per- and Polyfluoroalkyl Substances

PFBS Perfluorobutane Sulfonic Acid

PFOA Perfluorooctanoic Acid

PFOS Perfluorooctane Sulfonic Acid POTW Publicly Owned Treatment Works

PS Prioritization Score

RMP Regional Monitoring Program
RPA Reasonable Potential Analysis

SCAP Southern California Alliance of POTWs

SF Bay San Francisco Bay

SFEI San Francisco Estuary Institute

TAC Toxic Air Contaminant
TMDL Total Maximum Daily Load
TIN Total Inorganic Nitrogen
TNI The NELAC Institute
TST Test of Significant Toxicity

WQBEL Water Quality Based Effluent Limitation

WQO Water Quality Objective