

AIR ISSUES & REGULATIONS COMMITTEE
A Committee of the Bay Area Clean Water Agencies

Quarterly Meeting
March 31, 2021

Agenda

- COVID-19: Resources and Meetings
- State Legislation that May Impact Air Issues & Regulations
- New BACT for Large Standby/Emergency IC Engines
- Criteria Air Pollutant & Air Toxics Reporting:
AB 617 & AB 2588 Program Updates
- BAAQMD Rule 11-18: Reduction of Risk from Air Toxics
- SB 1383: SLCP Reduction Regulations and Implementation Status
- BAAQMD Proposed Regulation 13: Climate Pollutants CH₄ and N₂O
- CARB Advanced Clean Vehicle Rules
- Open Discussion/Member Updates
- Adjourn





COVID-19

- **CWEA Webinar: Mar 24th**
- **CWEA-CASA Webinar: April 21st**
- **CASA website for resources:**
<https://casaweb.org/covid-19/>
- **Wastewater-based epidemiology (WBE) efforts →**
 - CDC managing national database (SWRCB to submit data) – National Wastewater Surveillance System DCIPHER
 - Survey distributed by CASA on behalf of the Water Quality Monitoring Council to understand who is participating in surveillance, labs used, and other details
- **Reevaluate In-person meetings as conditions allow**



Last updated: 12/1/20

COVID-19 is impacting the wastewater community in a variety of unique and challenging ways. Below are a series of resources that may be useful to reference for local wastewater agencies as we navigate through this crisis. For a overview, this information represents the state of our knowledge at a point in time and should be used as a resource for exploring additional actions. Circumstances are always subject to change, and agencies must make their own decision about what course appropriately balances public safety while ensuring the continued delivery of critical infrastructure services.



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Newly Introduced State Legislation

- **AB 426: Toxic air contaminants**
- **AB 1005: Scientific review panel, toxic air contaminants**
- **AB 619: SLCP implementation, organic waste**



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New BACT for Large Emergency Diesel Engines

- Issued December 22, 2020 and applies to:
 - Large diesel emergency engines ≥ 1000 bhp
 - Applications deemed complete since January 1, 2020

EPA Tier 4 Emission Standards

Pollutant	BACT Limit
POC	0.14 g/bhp-hr
NO _x	0.5 g/bhp-hr
SO ₂	CARB Diesel Fuel (15 ppm sulfur)
CO	2.6 g/bhp-hr
PM-10	0.02 g/bhp-hr

What if the engines that are proposed in the application do not meet the new BACT standards?

- Install diesel particulate filter to meet PM emissions limits
- Install selective catalytic reduction system to meet NO_x emissions limits
- Purchase EPA-certified or EPA-compliant Tier 4 engine

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New BACT for Large Emergency Diesel Engines

- Submitted letter February 23rd
 - Air District not following its own internal procedures and rules specified in Rules 2-2-301, 2-2-414, and 2-1-409
 - Rule 2-2-301: sets BACT requirements for new and/or modified sources, relying on BACT/TBACT Workbook for reference to technologies
 - Rule 2-2-414: states and requires the “APCO publish and periodically update the BACT/TBACT Workbook specifying BACT requirements for permitted sources,” to be “determined for a source on a case-by-case basis, using the workbook as a guidance document”
 - Rule 2-1-409: “regulations or standards in force on the date the application is declared by the APCO to be complete”
 - Defining BACT based only on existing installations
 - Advanced technology used in Tier 4 emergency diesel generators prone to failure and automatic shutoff cannot be bypassed
 - SCAQMD has permitted a Tier 4 generator at a hospital and lead permitting staff agreed it is not “achieved-in-practice”
- Meeting with BAAQMD March 5th
- Webinar March 29th


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New BACT for Large Emergency Diesel Engines

- Central San status update
- San Mateo status update
- City of San Jose (installation as a “backup to the backup”)



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Criteria Pollutants & Toxics Reporting and Air Toxics “Hot Spots” Program Updates

- AB 617: Criteria Air Pollutant and Toxic Air Contaminant Reporting (CTR)
Was requiring all WWTPs to report full Hot Spots compound list (>500).
 - Implements statewide annual reporting of emissions from facilities. It establishes new policies to improve emissions inventory data (critical to understanding sources contributing to adverse health risks or other impacts at the local, regional, and statewide level).
- AB 2588: Air Toxics "Hot Spots" Program (Hot Spots Program)
Expands Hot Spots compound list to ~1,000 compounds (including 60 PFAS compounds).
 - 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.



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Criteria Pollutants & Toxics Reporting and Air Toxics “Hot Spots” Program Updates

- Waste Sector has been moved to its own phase (3B)
- Intent is for all WWTPs to report business as usual through 2028, including those large WWTPs that trigger original applicability thresholds
- In the meantime, the wastewater sector has until 2028 to perform a “two-step process” (collaborating with CARB and air districts) to determine shortlist of compounds to quantify/report in 2029 forward
- Two-step process:
 1. GC/MS Scan for determining detectable compounds
 2. Quantification Process (once quantification methods have been approved by CAPCOA and Scientific Review Panel) - mimic 1990 Pooled Emissions Estimation Program (PEEP)



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Criteria Pollutants & Toxics Reporting and Air Toxics “Hot Spots” Program Updates

- Informal 15-Day Changes – CASA submitted comments
- CARB to address specific text changes for formal draft
 - Clarifying BAU reporting for all WWTPs through 2028
 - Extension period for unforeseen circumstances
- Formal 15-Day Changes draft released **March 30th**
- Meeting with CARB staff **April 2nd**
- May have one more comment period

- Once formal draft is submitted to OAL, CASA to begin drafting outline of wastewater sector’s formal approach to the two-step process and identify participating agencies

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Rule 11-18: Risk Reduction from Air Toxic Emissions at Existing Facilities

- Purpose: Protect public from TACs from existing facilities
- Phased implementation based on cancer prioritization – WWTPs in Phase 2 (data requests starting 2021)
- **ISSUES:**
 - Emission factors are outdated (based on old influent data) and may result in erroneously high Prioritization Scores.
 - Grouping of related sites (adjacent landfills, etc)
- If WWTP triggers Rule, it requires:
 - Health Risk Assessments (18-month process)
 - Risk Reduction Plan development (18-month process)
 - Implementation of Risk Reduction Measures (5 years + 5 years to implement)



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Rule 11-18: Risk Reduction from Air Toxic Emissions at Existing Facilities

- Actions to Monitor:
 - Final implementation schedule from BAAQMD
 - BAAQMD plans to send data requests in quarterly batches – expect Phase II sites with Priority Score >100 to be first (starting third or fourth quarter 2021)
 - Plants expected to respond to data request (2-4 months)
- AIR Emissions Inventory Subcommittee
 - Need members to run the data collection and emissions inventory spreadsheet template
- Still need to address emission factors...



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SB 1383 (SLCP Reduction & Implementation)

- 40% methane reduction by 2030 (relative to 2013 levels)
- Organic waste diversion from landfills (includes biosolids, digestate, and sludges)
 - 50% by 2020 (relative to 2014 levels)
 - 75% by 2025 (relative to 2014 levels)
- Next Steps
 - Adopted Nov 9, 2020
 - State to enforce Jan 1, 2022
 - Local jurisdictions start Jan 1, 2024
 - Compliance by Jan 1, 2025



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SB 1383 (SLCP Reduction & Implementation)

- Final Statement of Reasons released
- Items to address...
 - Determine what equates compliance
 - Understand how to handle County Ordinances
 - Determine if there will be flexibility with enforcement (following SB 619)
 - Understand procurement of products
 - Transfer of Emission Reduction Credits (offsets) from landfills to projects that divert/process organic waste



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BAAQMD Proposed Regulation 13:

Climate Pollutants CH₄ and N₂O

Rule development suspended due to COVID-19 & lack of data

Rule	Next Workshop	Board Presentation	Notes
13-1: Significant Methane Releases	TBD	TBD	Tabled indefinitely to focus on source-specific rules.
13-2: Organic Waste Handling	TBD	TBD	Draft focused on organic material handling: Material Recovery Facilities, Transfer Facilities, Chip & Grind Facilities.
13-3: Composting Operations	TBD	TBD	Draft language in development, not released.
13-4: Sewage Treatment & Anaerobic Digestion	TBD	TBD	BACWA requested involvement to provide input on draft language. Draft rule to consider biogas produced/collected, minimizing other pollutants, flare requirements, record keeping, reporting requirements, etc. BAAQMD is working with BACWA to collect baseline information to inform rule development and reviewing an unsolicited proposal.
13-5: Hydrogen Plants	-	TBD	Focus on hydrogen production at petroleum refineries.
8-34: Solid Waste	-	TBD	Focus on methane from landfills – BAAQMD to align with

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BAAQMD Proposed Regulation 13:

Climate Pollutants CH₄ and N₂O

Rule development suspended due to COVID-19 & lack of data

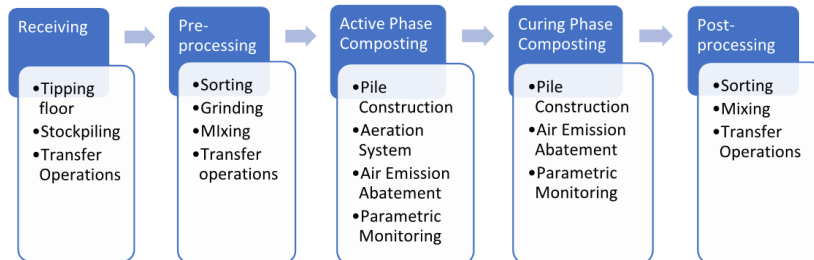
- BAAQMD realized it needed more data, before drafting regulations!
 - Convened the Organic Recovery Technical Working Group (TWG)
 - Seeking summaries of best management practices
- BACWA to develop a baseline understanding of current best management practices for POTWs (based on survey questions), specifically:
 - Anaerobic digesters and ancillary equipment
 - Other treatment processes (i.e., lagoons)
- BAAQMD may incorporate BMPs as part of standard permit conditions vs further regulate



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Drafting Survey to Summarize BMPs for Controlling CH₄ through ADs and Lagoons

- Basic block process flow diagram of solids/biogas through AD's and lagoon
 - Identify solids handling prior to digestion and post-digestion processes
 - Identify areas of potential biogas leaking/releasing



Example: Compost flow diagram showing general steps

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Drafting Survey to Summarize BMPs for Controlling CH₄ through ADs and Lagoons

- List (by process) best management practices to detect and control methane emissions
 - Leak detection – methods to check/tools and frequency of checks pre-, during, and post-digestion
 - Biogas/methane capture
 - Biogas conditioning
 - Onsite combustion (beneficial use/abatement)
 - Other beneficial uses (processing for CNG or pipeline injection)



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CARB Advanced Clean Vehicle Rules: Zero-Emission Forklifts

Zero-Emission Forklifts Details

- Purpose: Accelerate deployment of zero-emission technology in forklifts
- Full implementation by 2035
- Board consideration in early 2022
- Early regulatory concepts focus on equipment phase-outs based on unit model year and size
- CARB's October 2020 presentation can be found [here](#)

Next Steps...

- CASA member survey to help assess the impact to members (survey produced by SCAP)



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CARB Advanced Clean Vehicle Rules: Clean Truck Rule

Clean Truck Rule Details

- Requires manufacturers increase electric vehicles sales thru 2045
- Requires large entities report vehicle 2019/2020 activity by **May 1, 2021:**
 - >\$50 M in revenue from related subsidiaries, subdivisions, or branches, and has at least one vehicle
 - Owns 50 or more vehicles
 - Dispatches 50 or more vehicles into or throughout California
 - Is a government agency (federal, state, local, and municipalities)!

Next Steps...

- OAL approved March
- Report activity data May 1, 2021!
- Reported information will be used as basis for Clean Fleet Rule development
 - Mileage
 - Hours of operation
 - Remote assets
 - Specialty vehicles and critical response needs



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CARB Advanced Clean Vehicle Rules: Clean Fleet Rule

Clean Fleet Rule Details

- Zero-emission fleets by 2045
- Government entities viewed as early adopters
- Convert public fleets by 2035 (purchase agreement by 2027)
- Goal to adopt regulation by end of 2021 (may extend), implement by 2024

Working with CMUA, ACWA, CSDA, SCPPA and SoCalGas

Next Steps...

- Workshops held 3/2 & 3/4
- Comments due week of 3/29
- Draft regulation to come - 45-day comment period
- Ideas conceptualized
 - Establish ZEV fleet standard
 - Promote innovative transportation technologies
 - Near-ZEVs



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Open Discussion / Member Updates

- BAAQMD Leadership meeting topics
 - Implications of retroactive rules
 - Status of research on nitrous oxide emissions from WWTPs
 - Influent compound concentration limits
 - Inspector permit interpretation vs actual language



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Thank you!

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