



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

**Quarterly Meeting**  
**November 17, 2021**

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## Agenda

- State Legislation that May Impact Air Issues & Regulations
- Proposed Amendments to BAAQMD Regulation 2 (Permitting)
- Criteria Air Pollutant & Air Toxics Reporting:  
AB 617 & AB 2588 Program Updates
- BAAQMD Rule 11-18: Reduction of Risk from Air Toxics
- CARB Scoping Plan Update
- BAAQMD Proposed Regulation 13: Climate Pollutants CH<sub>4</sub> and N<sub>2</sub>O
- Air District Tier 4 Engines → CARB Tier 5 Engines
- BAAQMD Leadership Meeting
- Open Discussion/Member Updates
  - Ferric Chloride Shortage
- Adjourn



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## Status of State Legislation

- SB 619: SLCP implementation, organic waste
  - CalRecycle Workshop Series: Nov 18<sup>th</sup>  
Webinar to describe how your agency can become eligible for deferred compliance



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## Proposed Amendments to BAAQMD Regulation 2: Rules 2-1 and 2-5

- Intended to reduce exposure to carcinogenic TACs in overburdened communities
- Updates Health Risk Assessment (HRA) guidelines
- Updates list of TACs and trigger levels (Table 2-5-1)



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## Proposed Amendments to BAAQMD Regulation 2: Rules 2-1 and 2-5

- Public Workshop on Concepts May 12<sup>th</sup>
- Submitted comments on concepts May 28<sup>th</sup>
- Public Workshop on Draft Amendments Aug 24<sup>th</sup>
- Submitted comments on Sept 3<sup>rd</sup>
- Board presentation on Proposed Amendments Sept 27<sup>th</sup>
- Discussed at BAAQMD-BACWA Leadership meeting Oct 13<sup>th</sup>
- Scheduled for Board adoption Dec 15<sup>th</sup>



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## Proposed Amendments to BAAQMD Regulation 2: Rules 2-1 and 2-5

- Allowable risk in overburdened communities is 6 per million (instead of 10 per million)
- New definitions
  - "essential public service" does not include POTWs
  - "project" is any project at facility within 5 years (used to be 3)
  - "baseline" for modifications is lowest of 3 scenarios ("actual", "permitted", "capacity")
- Extends review times
  - completeness from 15 to 30 working days
  - action from 35 to 90 or 180 working days (depending on complexity)
  - public comment response from 30-60 days



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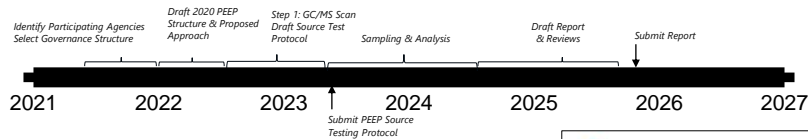
## CARB enacted Criteria Air Pollutant & Toxic Air Contaminant Reporting (CTR)

- AB 617 gives CARB authority to “harmonize” air monitoring, reporting, & emission reductions from stationary sources
- AB 2588 compound list updated to >1000 compounds
  - Many of the compounds have unknown toxicity levels
  - Many of the compounds have unknown emission factors
  - Many of the compounds are not relevant to WWTPs
- CASA negotiated phased compliance, allowing WWTPs to:
  - Report business as usual through 2028 (begin reporting in 2029)
  - Perform a “two-step process” for determining shortlist of compounds
    - Scanning air space of unit processes to determine detectable compounds
    - Determining the sampling and analysis methods to quantify emissions (Mimic 1990 Pooled Emissions Estimation Program, PEEP)

*Final Statement of Reasons officially confirmed our interpretation of the regulation!*

## Next steps for the wastewater sector...

- CASA to draft proposal for performing the Two-Step Process
- Approximate timeline for Two-Step Process: ~5 years



*CASA One-Page Summary to educate your staff and local air district staff!*



## 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

### Implementation Procedures (April 2018)

“Provide opportunities for public review and comment on site-specific health risk assessment results and risk reduction plans.”

#### Initial draft HRAs under Rule 11-18:

- AB&I Foundry
- Irvington Memorial Cemetery Crematorium
- Santa Clara Cogeneration Plant
  
- Draft HRAs showed elevated health risks at the foundry and crematorium primarily due to toxic metals
- Natural gas cogen facility (7 MW) risk was below trigger limits → not subject to Rule 11-18



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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 (delayed)
  - Plants expected to respond to data request (2-4 months)
- Hope to address emission factors via updated PEEP



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## AB 32 Climate Change Scoping Plan Update 2022

- **Target:** Carbon neutrality by 2045 (**can we do it by 2035?!**)
- Scoping Plan [Workshops](#) through Spring 2022 on:
  - Natural and Working Lands
  - Transportation Sector (ACF regulation)
  - Electricity Sector (SB 100 report)
  - Short-Lived Climate Pollutants (SLCP reduction under SB 1383 regs)
  - Environmental Justice – Petition to exclude fuels derived from dairy and swine manure from LCFS Program (heard by CARB Oct 28)
- Last workshops: Oct 29<sup>th</sup> (Scenario Inputs recognize biogas) and Nov 2<sup>nd</sup> (Electricity Sector)
- Next workshop: Nov 17<sup>th</sup> ACF emissions inventory
- Full draft expected by Spring 2022, final draft in Fall 2022



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## SB 1383: Organic Waste Methane Emissions Reduction

- 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)
- Implementation
  - State to enforce on jurisdictions Jan 1, 2022 (local entities enter agreements)
  - Local jurisdictions to start enforcement Jan 1, 2024
  - Compliance by Jan 1, 2025



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## SB 1383: Organic Waste Methane Emissions Reduction

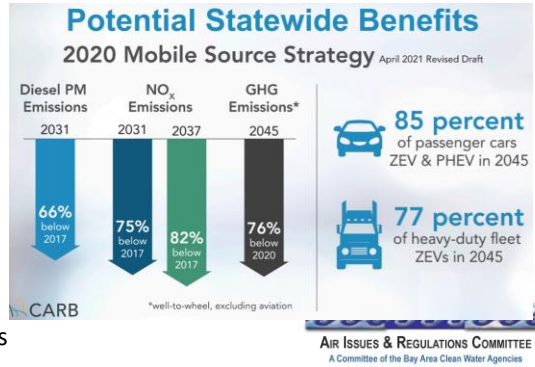
- Items to address...
  - Transfer of Emission Reduction Credits (offsets) needed from landfills to POTWs if combusting biogas onsite and compost facilities
    - Met with CalRecycle
    - Meeting with CAPCOA postponed to May 2022
  - Understanding procurement of products – will they consider other products (biosolids) and how applied to city and district facilities
  - Updates to General Order considered, SWRCB Workgroup established looking at land application of biosolids
- CalRecycle Workshop Series
  - Oct 26<sup>th</sup> on RDRS reporting – follow-up meeting with CASA members on changes to biosolids reporting
  - Nov 18<sup>th</sup> on SB 619



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## CARB Advanced Clean Fleet (ACF) Regulations

- Mandate: Zero-emission fleets by 2045 (Governor pushing for 2035, considered in Scoping Plan Update scenarios)
- 2020 Mobile Source Strategy heard by CARB Board Oct 28<sup>th</sup>
  - Mix of vehicle technologies that would provide the level of emissions reductions needed to meet our goals
  - May go beyond levels of clean technologies from current regulatory proposals



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## CARB Advanced Clean Fleet (ACF) Regulations

- Mandate: Zero-emission fleets by 2045 (Governor pushing for 2035, considered in Scoping Plan Update scenarios)
  - Draft regulatory language released Aug 25<sup>th</sup>
  - CARB to release a second draft regulation early 2022
  - Target adoption by summer 2022
- Workshops held/Actions since last workshop:
  - Nov 17<sup>th</sup> – Emissions Inventory
  - Comments on Oct 6<sup>th</sup>, 13<sup>th</sup>, and 26<sup>th</sup> workshops submitted Oct 29<sup>th</sup>
  - Met with CARB Execs Nov 5<sup>th</sup> – committed to find a solution for biogas
- CASA Actions
  - Meet with CARB Board Members and Executives
  - Subgroup meeting being scheduled



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## SB 100 Joint Agency Report

- 100% Clean Energy Act of 2018
- Renewable and zero-carbon resources to supply 100% of electric retail sales to end-use customers by 2045
- CEC, CPUC, and CARB drafted joint agency report identifying pathways to achieve mandate (initial assessment)
- Nov 1<sup>st</sup> – Joint Agency Workshop on *Planning for Senate Bill 100 Analysis of Non-Energy Benefits, Social Costs and Reliability*
  - Session 1 – Non-energy benefits and social costs
  - Session 2 – Modeling approaches and data inputs/assumptions to evaluate reliability of different renewable and zero-carbon resource builds
- Scoping Plan scenarios include stationary uses for biogas utilization



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## BAAQMD Proposed Regulation 13: Climate Pollutants

**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.

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## Drafting Summary of BMPs for Controlling CH<sub>4</sub> 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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## BACT for Large Emergency Diesel Engines (≥1,000 bhp) – Tier 4 Engines

- Responding to Air Districts
  - Bay Area AQMD – comments submitted by BACWA 2/23
  - Sacramento Metro AQMD – comments submitted by CASA 4/30
  - SCAQMD – likely to adopt requirements similar to BAAQMD and SMAQMD (BACT scientific review meeting)
- CARB and local air districts exploring electrified back-up engines and fuel cells for the future



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## Proposed Amendments to Tier 4 Off-Road Diesel Engine Standards (aka Tier 5)

- More stringent exhaust standards relative to Tier 4
  - depending on engine size
  - NOx up to 90% more stringent
  - PM up to 75% more stringent
  - no change to NMHC or CO
- Staff looking for input



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## Proposed Tier 5 Tentative Schedule

- First Public Workshop November 3
- Second Public Workshop December 14
- Board consideration 2024-2025
- Implementation 2028-2029



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## BAAQMD Leadership Engagement

- Kicked off: December 7, 2020
- Met two more times since, on BACT in February and air toxics/chlorine shortage in October
- The intent is to deepen the relationship, so we become trusted resources and partners
- Topics to cover in future meetings:
  - Permitting process (collect data)
  - Air Toxics risk reduction implementation
    - CARB AB 617 / AB 2588 regulations (statewide Two-Step Process)
    - BAAQMD Rule 11-18 (tentative implementation in 2023)
    - BAAQMD Regulation 2 amendments
  - Methane regulatory development

*BAAQMD would like to participate in statewide two-step process!*



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## Open Discussion / Member Updates

- Ferric chloride shortage



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# Thank you!

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