



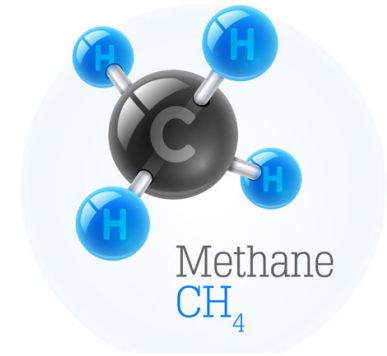
# AIR ISSUES & REGULATIONS COMMITTEE

A Committee of the Bay Area Clean Water Agencies

**BACWA Annual  
Members Meeting  
January 10, 2020**

# AIR Issues & Climate Adaptation

- Air Issues & Regulations
  - SB 1383: Short-Lived Climate Pollutant Reduction
  - BAAQMD Proposed Regulation 13: Climate Pollutants
  - Rule 11-18: Air Toxic Emissions at Existing Facilities
  - AB 617: Community Air Protection Program
- Climate Adaptation
  - State Water Board
  - CA Coastal Commission
  - Bay Area Climate Adaptation Network



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# SB 1383: Short-Lived Climate Pollutant Reduction Regulation (effective 2022)

- 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)
- CEC/CPUC to incentivize biogas production/use



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# Formal rule-making concludes January 18<sup>th</sup>: *Proposed SLCP Reduction Regulations*

- Expecting the formal draft regulation to:
  - Limit/prohibit local ordinances preventing biosolids land application
  - Credit biogas generated by diverted organic waste
  - Consider disposition of organic waste to processes other than anaerobic digestion or composting as “landfill disposal”
- Next Steps
  - Adoption by January 18, 2020
  - State to start enforcement on jurisdictions January 1, 2022
  - Jurisdictions to start enforcement January 1, 2024



# Bay Area AQMD Regulation 13: Climate Pollutants Rule Development

CH<sub>4</sub>



## Rules and Regulations

### GHGs

Regulation 13: Climate Pollutants

Rule 13-1: Significant Methane Releases

CH<sub>4</sub>

Rule 13-2: Organic Material Handling

CH<sub>4</sub>

Rule 13-3: Composting Operations

CH<sub>4</sub>

Rule 13-4: Sewage Treatment & AD\*

CH<sub>4</sub>, N<sub>2</sub>O

*Rule 13-5: Hydrogen Plants*

CH<sub>4</sub>

*Rule 8-34: Solids Waste Disposal Sites\**

\* Future rule development efforts.

# Bay Area AQMD Regulation 13: Climate Pollutants Rule Development

CH<sub>4</sub>



## Rules and Regulations

	GHGs	Odors	VOCs	Toxics
Regulation 13: Climate Pollutants				
Rule 13-1: Significant Methane Releases	CH <sub>4</sub>	Yes	Yes	Yes
Rule 13-2: Organic Material Handling	CH <sub>4</sub>	Yes	Yes	Yes
Rule 13-3: Composting Operations	CH <sub>4</sub>	Yes	Yes	Yes
Rule 13-4: Sewage Treatment & AD*	CH <sub>4</sub> , N <sub>2</sub> O	Yes	Yes	Yes
<i>Rule 13-5: Hydrogen Plants</i>	CH <sub>4</sub>	Yes	Yes	Yes
<i>Rule 8-34: Solids Waste Disposal Sites*</i>				



# Bay Area AQMD Regulation 13: Climate Pollutants Rule Development

CH<sub>4</sub>



Rule	Next Wkshp	Board Presentation	Notes
<b>13-1: Significant Methane Releases</b>	TBD	TBD	Tabled indefinitely, focus on source-specific rules first
<b>13-2: Organic Waste Handling</b>	None	Q2 2020	Focus on organic material handling: Material Recovery Facilities, Transfer Facilities, Chip & Grind Facilities.
<b>13-3: Composting Operations</b>	Q2 2020	Q4 2020	Draft language in development.
<b>13-4: Sewage Treatment &amp; Anaerobic Digestion</b>	Q2 2020	Q4 2020 (likely 2021)	BACWA requested involvement to provide input on draft language and workshop report. Draft rule to consider biogas produced/collected, minimizing other pollutants, flare requirements, record keeping, reporting requirements, etc.
<b>13-5: Hydrogen Plants</b>	Q1 2019	Q3 2020	Focus on hydrogen production at petroleum refineries.
<b>8-34: Solid Waste Disposal (Landfills)</b>	Q2 2020	Q4 2020	Focus on methane from landfills – BAAQMD to align with state and federal requirements.

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

- Purpose:  
Protect public from toxic air contaminants at existing facilities
- Phased implementation based on cancer prioritization –  
WWTPs in Phase 2 (starting in 2020)
- **ISSUE:** Emission factors are outdated (based on old influent data) and may result in erroneously high Prioritization Scores
- 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)





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

- Actions to Monitor:
  - Final implementation schedule from BAAQMD
  - Watch for email from BAAQMD, will send data requests in quarterly batches – expect Phase II sites with Priority Score >100 to be first (starting in 2020)
  - Plants expected to respond to data request (2-4 months)
- AIR Emissions Inventory Subcommittee
  - Developed a data collection and emissions inventory spreadsheet template (for consistency and ease of responding to BAAQMD)

*Thank you Cameron Kostinger Mumper (Sunnyvale)  
and Samantha Engelage (Palo Alto)!!*

- Still need to address emission factors...



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# AB 617: Proposed Regulation Criteria Air Pollutant & Toxic Air Contaminant Reporting

- CARB to harmonize community air monitoring, reporting, & local emissions reduction programs for CAPs and TACs (and GHGs).
  - Assess community exposure
  - Establish criteria for air monitoring
  - Identify source contributions and strategies for emissions reduction
- October 2019
  - Establish emission reduction targets, schedule, & enforcement programs
  - Air Districts to submit annual progress reports to CARB in 2019 for 2018
- Local air districts are moving faster! (i.e., BAAQMD Rule 11-18)



# AB 617: Proposed Regulation Criteria Air Pollutant & Toxic Air Contaminant Reporting

- Proposed applicability thresholds for stationary sources:
  - Subject to GHG Mandatory Reporting Regulation
  - Emit 250+ tpy of a nonattainment criteria air pollutant or its precursor
  - Receives an “elevated” Air Toxics Hot Spots prioritization based on cancer or non-cancer health impacts
  - Sector list, including 10 MGD WWTPs w/ covered primary systems (>5 MGD uncovered primary systems) to report the complete AB 2588 [list of toxic compounds](#) (**over 600 compounds**) on an annual basis



# AB 617: Proposed Regulation Criteria Air Pollutant & Toxic Air Contaminant Reporting

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  - Subject to GHG Mandatory Reporting Regulation
  - Emit 250+ tpy of a nonattainment criteria air pollutant or its precursor
  - Receives an “elevated” Air Toxics Hot Spots prioritization based on cancer or non-cancer health impacts
  - ~~– Sector list, including 10 MGD WWTPs w/ covered systems (>5 MGD uncovered primary systems) to report the complete AB 2588 [list of toxic compounds](#) (over 600 compounds) on an annual basis~~

*Threshold to return in a future phase of implementation*



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# AB 617: Proposed Regulation Criteria Air Pollutant & Toxic Air Contaminant Reporting

- Actions:

- Meeting with CARB leads of AB 617 and AB 2588 updates – AB 617 Regulation and AB 2588 Program updates go to board end of 2020, early 2021
- Participating in AB 2588 Program updates to weigh in on the toxics list expansion (another 600+ compounds) and testing/modeling methods
- Exploring development/adoption of a short-list of toxics for WW sector
- Discussing performing an updated pooled emissions estimating effort
- Collaborating with CASA to draft a state-wide approach (for a pooled emissions study) to update default emission factors for the short-list of compounds



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# State actions to adapt water infrastructure to impacts of climate change

- State Water Board
- California Coastal Commission



**REVIEW DRAFT**

Questions for Wastewater Collection, Conveyance, and/or Treatment Agencies  
CLIMATE CHANGE IMPACTS

Agency: \_\_\_\_\_

Check facilities your agency is responsible for: ☐ Collection ☐ Interception ☐ Treatment ☐ Disposal

Approximate population receiving wastewater service from your agency: \_\_\_\_\_

Contact: \_\_\_\_\_ Title: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_ Date: \_\_\_\_\_

PLEASE NOTE THIS SURVEY DOES NOT ALTER PERMIT REQUIREMENTS, DOES NOT SERVE IN LIEU OF ACTION PLANS, AND IS NOT A COMMITMENT OF FUNDING.

1. Has your agency conducted a facility or infrastructure vulnerability assessment that includes climate change-related impacts or future extreme weather events (e.g. sea level rise, storm surge, drought, high intensity precipitation, flooding, or extreme heat)? ☐ Yes (Skip to 1b.) ☐ No

1a. Is there a local or a regional assessment (e.g. municipal Climate Action Plan or Integrated Regional Water Management Plan) that addresses infrastructure vulnerability to climate change-related impacts and includes your system?

☐ Yes. Continue to 1b.

☐ No. The survey for your agency is complete. Stop here.

1b. Which components were covered by the vulnerability assessment? (Check all that apply)

<input type="checkbox"/> Collection system	<input type="checkbox"/> Oxidation ponds, sludge drying beds, and wet weather facilities
<input type="checkbox"/> Interceptors and pump stations	<input type="checkbox"/> Power source / Biogas / Cogeneration
<input type="checkbox"/> Treatment facilities	<input type="checkbox"/> Telecommunications
<input type="checkbox"/> Dechlorination	
<input type="checkbox"/> Discharge facilities	

2. Are results of the assessment available on the internet? ☐ Yes ☐ No

If Yes, please provide the website address: \_\_\_\_\_

3. Select status of measures to increase resilience of your facilities to climate change impacts. For measures already in place, indicate the year of completion. For in-progress, and planned measures indicate the expected year of completion:

Measures	Status of measures				Completion Year
	In Place	In-progress	Planned	Not Planned	
Expanding capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Increasing maintenance or rehabilitation frequency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Enhancing treatment capability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hardening facilities (e.g., installing, increasing or improving barriers, buffers or levees, elevating or floodproofing equipment, or sealing doors, sewer mains or manholes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



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# October 2019, Simi Valley Tentative Order:

- Special Studies, Technical Reports, and Additional Monitoring Requirements
  - Climate Change Vulnerability Assessment & Mitigation Plan:
    - Considering flooding, wildfire, sea level rise, or other climate-related changes
    - Assess/manage threats that may impact a wastewater treatment facility's...operation, influent quality, its collection system, and water quality, including changes to influent water temperature and pollutant concentrations, and beneficial uses.
  - The Climate Change Plan is due 12 months after adoption of this Order.



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Critical Coastal Infrastructure at Risk



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☐ Treatment facilities ☐ Telecommunications  
☐ Dechlorination  
☐ Discharge facilities

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Hardening facilities (e.g., installing, increasing or improving barriers, buffers or levees, elevating or floodproofing equipment, or sealing doors, sewer mains or manholes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



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# Coastal Commission Permitting and Climate Change

- Critical Infrastructure Guidance Document to be drafted by early 2020
- Various smaller coastal WWTPs in discussions regarding “managed retreat” and permit negotiations
  - Morro Bay and four others
  - Based on sea level rise projections
- **Next steps:** Meeting with CCC to discuss which WWTPs they will target in 2020 (they have a spreadsheet!)



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# Thank you!

## Upcoming Meetings:

March 25<sup>th</sup>

BACWA AIR Committee, 10 am – 1 pm

CASA Air Quality, Climate Change & Energy (ACE) Workgroup  
January 17<sup>th</sup>, 8:30 – 10:30 am (Conference Call/Webinar)

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