



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

**Quarterly Meeting**  
**November 30, 2022**

1

1

## Agenda

- 2022 State Legislation and Budget Update
- BACWA-BAAQMD Implementation Workgroup – Oct 17<sup>th</sup> Meeting Summary
- CARB Statewide Two-Step Process
- BAAQMD South Bay Odor Study
- BAAQMD to Evaluate Localized Impacts of PM<sub>2.5</sub>
- CARB Scoping Plan Update Targeting Carbon Neutrality by 2045
- CARB Potential Amendments to In-Use Off-Road Diesel-Fueled Fleets Regulation – Nov 17<sup>th</sup> Hearing
- CARB Proposed Amendments to Diesel Off-Road Emissions Standards: Tier 5 Criteria Pollutants and CO<sub>2</sub> – Dec 14<sup>th</sup> Meeting
- Federal Inflation Reduction Act
- Open Discussion/Member Updates
- Adjourn



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

2

2

## 2022 State Legislation Update

- Deadline for Governor to sign: September 30<sup>th</sup>
- **AB 1857** (Garcia, Cristina D) – **SIGNED!** Limits the amount of solid waste diverted to incineration /"transformation" processes (e.g., pyrolysis)
- **AB 1985** (Rivas, Robert D) – **SIGNED!** Phases in mandatory procurement of products (that improve soil health, C-sequestration) under SB 1383 – need NRCS Code 336 updated to allow biosolids to be eligible products (Virginia Jameson, CDFA, may help)
- **AB 2247** (Bloom) – **Vetoed but to revisit next year.** Requires labeling of products with intentional use of PFAS; **NOTE** both AB 1817 and AB 2271 were signed restricting PFAS in textiles and cosmetics (respectively)
- Hydrogen legislation (e.g., SB 1075 signed requiring evaluation of the role of hydrogen in California)



3

3

## 2022 State Legislation: Climate Package

- **CARBON NEUTRALITY:** AB 1279 codifies carbon neutrality no later than 2045 and establishes 85% emissions reduction target as part of that goal.
- **100% CLEAN ELECTRIC GRID:** SB 1020 establishes clean electricity targets of 90% by 2035 and 95% by 2040 to advance state's trajectory toward 100% clean electricity retail sales by 2045 (SB 100).
- **CARBON CAPTURE & REMOVAL:** SB 905 and SB 1314 advance engineered technologies to remove carbon pollution, while banning use of them for enhanced oil recovery. Establishes framework for carbon removal and capture, utilization and sequestration. SB 45 requires CalRecycle assist local jurisdictions in complying with SB 1383 regulations.



4

## 2022 State Election Outcomes

### ***Election Brings Major Changes to California Legislature***

- California voters elected 31 freshman legislators – 21 new members joining the State Assembly and 11 new members joining the Senate
- Several close races yet to be determined – final results expected soon
- All newly elected and standing members of the Senate and Assembly will convene December 5th to be sworn in
- Speaker of the Assembly
  - Speaker Anthony Rendon will serve until June 30<sup>th</sup>, after which Speaker-elect Robert Rivas will serve
  - This position determines how the Legislature is run day-to-day, sets major policy and Budget priorities for the caucus, appoints the Chairs of Committees and Subcommittees, and oversees resources, staffing and many other responsibilities of the California Assembly.
- After December 5, legislators will return to their districts until the Session kicks off January 4<sup>th</sup>



5

## 2022-23 State Budget Update

- \$280 M GGRF for Cap-and-Trade Discretionary Spending Plan:
  - \$50 M to ARB for Clean Cars 4 All and other Equity Projects
  - \$10 M to ARB for AB 617 implementation
  - \$5 M to ARB for methane satellites
  - \$30 M to ARB for community air monitoring
  - \$10 M to CalRecycle for methane reduction for wastewater treatment
- \$100 M to support Hydrogen Program at CEC and \$5 M to Governor's Office of Business and Economic Development to support hydrogen hubs
- \$50 M to support carbon removal projects
- \$235 M to support ZEVs and infrastructure, with \$180 M to support Clean Cars 4 All and other equity projects, \$15 M to support fueling infrastructure grants
- Budget outlook for 2023-24 shows a deficit – may not have much incentive funding.



6

## BACWA-BAAQMD Implementation Workgroup - Oct 17<sup>th</sup> Meeting Summary

- Statewide Two-Step Process
- Permitting Process and Timelines
- Source Testing Concerns
- Other topics for collaboration



7

7

## Implementation Workgroup Action Item Summary

- *Send the standard permit conditions markups to Sanjeev (Sarah)*
- *BAAQMD/CASA Air Toxics meeting – schedule end Nov/early Dec (Sarah)*
- *BACWA to send calendar invite for January 30<sup>th</sup> meeting (Lorien)*
- *BACWA to work with Jerry B on standard formatting for source testing results to improve reporting quality and efficiency*
- *Remind AIR Committee members to ask for extensions on source testing from Enforcement staff, not source testing staff (BACWA AIR Committee)*
- *Review PM 2.5 Local Risk Method document (BACWA AIR Committee)*
- *Engage in strategic planning with new Executive Officer and/or go to Finance and Budget Committee to request additional staff be assigned to permitting*



8

8

## Implementation Workgroup Action Item Summary

- Status of permit applications
- Members have reported on >15 ATC reviews (shortlist below)
- Average review time is 11 months
  - 6 have taken over 1 year
  - 1 took ~2 years

### Shortlist of ATC Reviews In Progress

Type of Equipment	Emergency boiler	Sludge dewatering	Emergency generator & odor control	Odor control	Cogeneration/biogas conditioning
Date Submitted	09/14/20	12/1/20	5/20/21	08/09/21	08/20/21
ATC Issued?	Status unknown	3/9/22	7/14/22	In Progress	Status unknown



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

- AB 617 gives CARB authority to “harmonize” air monitoring, reporting, & emission reductions from stationary sources
- AB 2588 Hot Spots compound list >1,700 compounds (from >500)
  - Unknown toxicity levels
  - Unknown emission factors
  - Many are not relevant to WWTPs
- Report business-as-usual through 2028 (reporting begins 2029 for 2028 data)
- Perform “two-step process” for determining shortlist of compounds



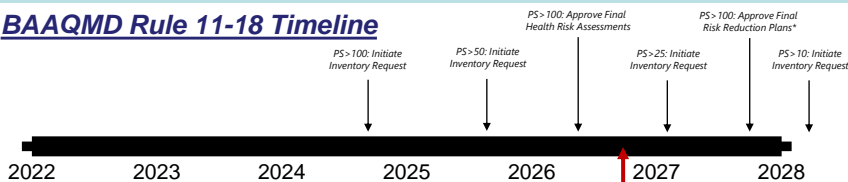
# BAAQMD Rule 11-18: Risk Reduction from Air Toxic Emissions at Existing Facilities

- Phased implementation based on cancer prioritization – WWTPs in Phase 2 (timeline is uncertain but tentatively shown on next slide)
- **ISSUES:**
  - Emission factors are based on old influent data and can result in erroneously high Prioritization Scores
  - Timing of Rule 11-18 risk reduction implementation not in full alignment with timing of CARB-approved Two-Step Process for updating emission factors
- **NEXT STEPS:** Coordinate risk reduction plan development with statewide two-step process (to be complete by 2028) to give time to...
  - Update relevant TAC emission factors
  - Determine needed and cost-effective risk reduction measures (considering rate payer impacts)

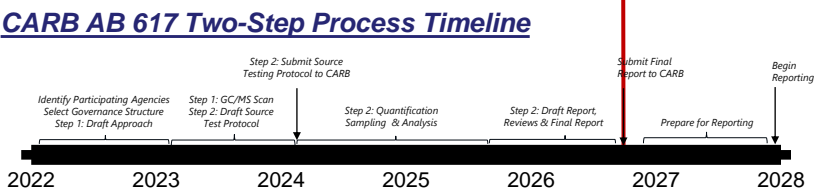


## Timelines: BAAQMD Rule 11-18 & CARB AB 617 Two-Step Process

### BAAQMD Rule 11-18 Timeline



### CARB AB 617 Two-Step Process Timeline



\*If applicable.

## Next steps for the Wastewater Sector...

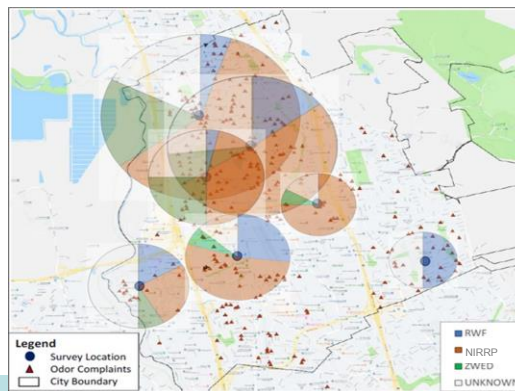
- Discussed draft approach for Step 1 with John Swanson (CARB)
- Meeting with air districts and source test specialists
  - SCAQMD feedback on spreadsheet of CARB-approved sampling/analysis methods today
  - BAAQMD overview December 7<sup>th</sup>
- Considering performing preliminary scanning at individual facilities in the Bay Area, Central Valley, and South Coast
- Drafting list of participating agencies, shows 100+ facilities are:
  - >10 MGD, covered primaries (working to clearly note which are covered)
  - >5 MGD, uncovered primaries
- Coordinate kick-off meeting w/ CARB Dec/Jan
- Select governing structure by end of year
- Actions led by CASA subgroup



13

## BAAQMD South Bay Odor Study

- Public draft released end of summer 2022
- Comments submitted by San Jose
- Stakeholder meeting October 2022



14

## BAAQMD to Evaluate Localized Impacts of PM2.5

- Air toxics framework to be established – more localized focus vs regional “local risk methodology” to address impacts on vulnerable populations
- Proposes to use a methodology similar to that used for Toxic Air Contaminants (concentration, breathing rate, receptor location)
- Developed in consultation with USEPA, CARB, and OEHHA
- Looks at annual averages (not maximum hour)
- Proposed schedule (subsequently delayed):
  - Advisory Council meeting in November (cancelled)
  - Stationary Source & Climate Impacts Council meeting in December (cancelled)
  - Transition to including in permit evaluations early 2023



15

## CARB Scoping Plan Update Targeting Carbon Neutrality by 2045

- Scoping Plan [Workshops](#) through Summer 2022:
  - Short-Lived Climate Pollutants reduction (under SB 1383)
  - Transportation Sector (proposed regulation)
  - Natural and Working Lands (Climate Smart Strategy)
  - Electricity Sector (SB 100 report)
  - Environmental Justice
- Draft concepts released in May (began meeting with CARB Board)
- Comments submitted June 24<sup>th</sup> and July 26<sup>th</sup>
- Attended Little Hoover Commission Meeting July 6<sup>th</sup>, Sept 8<sup>th</sup>, and Sept 22<sup>nd</sup> to get support for use of biogas as transportation fuel
- Staff workshop on modeling results October 28<sup>th</sup>
- Final draft released November
- Public Hearing expected December 15<sup>th</sup> (not confirmed)



16



## CARB Scoping Plan Update Targeting Carbon Neutrality by 2045

- **Governor's July Letter to CARB (July 2022)** – “Prioritize investments in equity and community resilience, while expanding opportunities for climate innovation and manufacturing here in California.”
- **CARB October 28<sup>th</sup> workshop** – updated modeling results
- **Final Draft released November 16<sup>th</sup>**
- **CASA has Asked:**
  - CARB maintain multiple uses for renewable non-fossil fuel biogas use for wastewater sector resilience (leveraging events during the heat wave)
  - Delay transition of essential public service fleet vehicles, subject to technology demonstration (providing explicit edits to regulation and ISOR)
  - CARB to acknowledge benefits of biosolids and show plans to incorporate quantification of those benefits in the NWL modeling



17

## Proposed CARB Advanced Clean (Public) Fleet Regulations

### Advanced Clean Fleet Rule

- Zero-emission fleets by 2045
- Applies to vehicles with a gross vehicle weight rating  $\geq 8,500$  lbs
- Government entities viewed as early adopters
- Convert public fleets by 2035 (purchase agreement by 2027)
- Goal to adopt regulation by end of 2022

### Issues of Concern

- No provisions for essential public services of water and wastewater
- Near-ZEV definition does not allow for wastewater biogas as low carbon fuel
- Unreasonable regulatory timeline
- Support normal replacement cycle of vehicles within public fleets and delayed start date for low population counties
- Credit for early purchase



18

## Proposed CARB Advanced Clean (Public) Fleet Regulations

- Prep for Oct 27<sup>th</sup> Public Hearing
  - Met with Chair Randolph and Board Members Davina Hurt (BAAQMD), Dr. John Balmes, Phil Serna (SMAQMD), Hector De La Torre, John Eisenhut, Tania Pacheco-Werner (SJVAPCD), Vice Chair Berg, Dr. Daniel Sperling (UC Davis).
  - Developed one-page summary for CARB Board
  - Provided redline edits in regulatory language
  - Submitted formal comment letter Oct 17<sup>th</sup>
  - Attended tour in Truckee Donner PUD with CARB executives
  - Coordinated testimonies of 15 CASA representatives Oct 27<sup>th</sup>
- Board Members acknowledged need for flexibility to implement SB 1383 (wastewater and waste sectors) and need for continued biogas uses until new markets have been established – staff to work with us to address in regulation
- Dec 12<sup>th</sup> Workshop for wastewater/waste sectors to discuss how to provide extension



19

## Potential Changes to CARB's Low Carbon Fuel Standard

- Designed to reduce petroleum dependency as well as achieve air quality benefits by:
  - Decreasing carbon intensity of CA's transportation fuel pool
  - Providing an increasing range of low-carbon and renewable alternatives
- July workshop discussed potential changes, recommending pathways process fuel to hydrogen vs CNG
- CASA submitted comments August 8th
- Workshop held November 9th discussing options for increasing stringency of CI targets for 2030 and beyond, design of initial scenarios for modeling, modeling approach, soliciting alternatives (all alternative scenarios achieve a 90% CI reduction target in 2045)



20

## Potential Changes to CARB's Low Carbon Fuel Standard

### Biomethane Crediting Context

#### Goals:

- Continue to incentivize deployment of methane reduction strategies to support meeting California's near-term SB 1383 targets and 2030 climate target
- Support Scoping Plan policy direction for long-term deployment/use of biomethane for hydrogen and expanding use of biomethane in non-transportation sectors
- Provide appropriate transition time to ensure alternative options are available - we understand investment, need to avoid stranded assets, and continued project operation depends on continued market and policy support.

#### Considerations:

★ **Phase-down of avoided methane crediting in LCFS at future date?** LCFS currently provides avoided methane crediting for particular pathways, with a guaranteed initial 10-year crediting period, without an end-date.

- Comments due December 9<sup>th</sup>
- Workshops to continue as Scoping Plan Update is finalized (expected December 15<sup>th</sup>)



21

## SB 1440 Procurement Requirements for Biomethane Pipeline Injection

- February 24, 2022: CPUC approved support for SB 1440 requiring Investor-Owned Utilities (IOUs) to procure biomethane via pipeline injection (*still must comply with Cal/OSHA standards, but EPA is expected to issue a new proposal this year and finalize in Aug 2023*)
- Biogas from POTWs who co-digest with diverted organic waste are given priority
- Requires 17.6 Bcf be procured in 2025 – apportioned among IOUs: SoCalGas 49%, PG&E 42%, SDGE 7%, SWG 2% based on their Cap-and-Trade allowance
- Procurement increases to over 4 times that in 2030 (72.8 Bcf)
- Must agree to use ZEVs or NZEVs - *CNG vehicles are allowed as NZEVs until electric vehicles are available*
- Electric generation from biomethane is limited to generation capacity at time entered into procurement agreement



22

## CARB Potential Amendments to In-Use Off-Road Diesel-Fueled Fleets Regulation

- Potential amendments presented Dec 14, 2021
- CASA submitted comments Jan 14, 2022, supporting:
  - Inclusion of Alternative Fuels to achieve criteria pollutant reductions
  - Exemption for Vehicles Used for Emergency Operations – also **includes water and sewer operations as essential services to qualify as EOs**
  - Compliance Extension for Equipment Manufacturer or Installer Delays
  - Compliance Flexibility for Delays in Availability of Tier 3 or Tier 4 Vehicles
  - Suggestions for a feasible records review process and tracking fleet Certificate of Reported Compliance
  - CARB to prepare and post a list of available R99 locations for entities to determine if their fleet is w/in an area that does/does not have R99 access
  - Use of alternative low emission fuels achieving the same or greater emissions reductions (e.g., renewable wastewater-derived biogas)
- Proposed amendments posted Sept 20<sup>th</sup>
- CARB Public Hearing held Nov 17<sup>th</sup>



23

## CARB Proposed Amendments to Diesel Off-Road Emission Standards: Criteria Pollutant & CO<sub>2</sub>

- Aiming to reduce NOx emissions (up to 90%) and PM emissions (up to 75%) compared to today's Tier 4 final emission standards
- Stringent exhaust standards for all power categories, including those that do not utilize exhaust aftertreatment (i.e., DPFs and SCRs)
- First-time CO<sub>2</sub> standards
- Proposal to Board expected 2024
- Implementation to start in 2028
- Next Workshop: December 14<sup>th</sup>



24

## CARB Proposed Amendments to Diesel Off-Road Emission Standards: Criteria Pollutant & CO<sub>2</sub>

- BAAQMD issued Tier 4 BACT December 2020
  - Diesel backup engines ≥1000 bhp
- CARB rulemaking underway
  - Board consideration 2024-2025
  - Implementation 2028-2029

### EPA Tier 4 emission standards

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

### Proposed Tier 5 emission standards

Pollutant	Potential Limit Reduction from Tier 4 Limits *
NO <sub>x</sub>	75-90% reduction
PM	50-75% reduction
NMHC	no change
CO	no change
	*depending on engine size

25

## Federal Inflation Reduction Act of 2022

**Purpose:** Support workers/families by reducing costs for prescription drugs, health care, and **energy**.

- **Expands tax credits** for energy efficient commercial buildings, new energy efficient homes, and Electric Vehicle charging infrastructure.
- **Expands tax credits** for wind, solar, nuclear, clean hydrogen, clean fuels, and carbon capture.
- Establishes Make it in America provisions/**tax incentives (rebates)** for manufacturing U.S.-sourced products (batteries, solar, and offshore wind components) and technologies for carbon capture systems.
- **Tax credits** will be increased by 10% if projects in communities previously relying upon coal, oil, or natural gas as significant source of employment
- Allocates funding toward the transition of Class 6 and 7 heavy-duty vehicles to ZEVs.
- Amends CAA to include a GHG Reduction Fund (\$7B)



26

## Open Discussion / Member Updates

- Air District staff visit to EBMUD August 11th
- Changes in BAAQMD enforcement priority
- BAAQMD “start-up” notification experience



- **Next Meeting:** March 1<sup>st</sup>



27

## Thank you!

Sarah Deslauriers  
[sdeslauriers@carollo.com](mailto:sdeslauriers@carollo.com)  
925-705-6404

Courtney Mizutani  
[cmizutani@sbcglobal.net](mailto:cmizutani@sbcglobal.net)  
925-686-5533



28