

Clean Water SoCal Air Quality Committee

*Committee Day
April 22, 2026*

Air Quality Committee

Steve Jepsen, Executive Director

David Rothbart, Air Quality Manager

Alison Torres, AQ Committee Chair

Jennifer McMullin, AQ Vice-Chair

Randa AbuShaban, AQ Vice-Chair



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Air Quality Committee Meetings

- Monthly, typically on Tuesdays
- 10 A.M. to 12 P.M.
- Virtual via ZOOM
- All welcome to attend!



AIR QUALITY COMMITTEE MEETING
TUESDAY, APRIL 21, 2026
10:00 A.M. TO 12:00 P.M.

Join Zoom Meeting:
<https://zoom.us/j/97962252699?pwd=NbZfnEa3ECTuEpt0U8E7hKvh8FHQBw.1>
Meeting ID: 979 6225 2699
Passcode: 578129

AGENDA

1. Introductions/Walk-in Items
2. Review of Action Items from Previous Meeting(s)
3. SDAPCD Report
4. CARB [CTR/EICG](#) Statewide Pooled Emission Study Update (Torres/Rothbart/Jepsen)
 - **Overview:** Reporting requirements apply to WWTP 5 MGD+; Contact CASA (Sara Deslauriers) to confirm agency participation.
 - **CTR Reporting Deadline:** Report 2028 Data by May 1, 2029
 - **Updates/Next Steps:**
 - PM (Yorke) submitted draft plan to CAPCOA (11/18/25), CAPCOA comments needed before submittal to CARB; Facility selection by Steering Committee in progress; RFP development for testing services in progress
 - Last CASA Subgroup meeting on 4/1/26; Next Subgroup meeting 5/6/26
5. Regulation III [Amendments](#) -SCAQMD Fee Rules (McMullin)
 - Public Hearing [Notice](#) 5/1/26; [Public Consultation Mtg](#) 3/17/26; 3.2% Increase
6. SCAQMD PAR Rule 1401-New Source Review of Toxic Air Contaminants (Torres)
 - [Working Group #3](#) 3/5/26; Next WG 4/30/26
7. Proposed SCAQMD BACT Updates (Randa/Niizawa)
 - BACT Scientific Review Committee ([SRC](#)) [Meeting](#) on 10/15/25-[Recording](#); Next SRC 5/28/26
 - Proposed LAER updates for Landfill Sulfur Treatment/Flares
 - Air Quality Standard- Hydrogen Sulfide- [Senate Bill 58](#)
8. SCAQMD New Source Review (NSR)-Offsets/Priority Reserve (Torres/Rothbart)
 - SCAQMD [Rule 1302](#) Essential Public Service definition; SCAQMD [Rule 1309.1](#) Priority Reserve; BARCT Requirements (3)(B)
 - Emission Offset/Priority Reserve Impacts for SB 1383 Food Waste/RNG Projects-
-SCAQMD concerns- Update to Stationary Source (11/21/25)-[Recording](#) 18:27; Update to Governing Board (12/5/25)- [Recording](#) (1:32)
 - Reg XIII -NSR- Working Group Meeting #1 ([Composting/RNG](#))-2/24/26

Air Quality Agencies

Federal



US EPA

Regulates stationary, area, and mobile sources including interstate transportation



Trains



Ships



Planes

State



CARB

Regulates mobile and area sources of air pollution



Cars



Trucks



Buses

Local

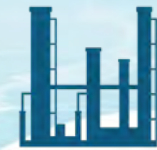


Local Air Districts

Regulates stationary and area sources of air pollution



Factories



Refineries



Residential woodstoves

Key Regulatory Updates

- CARB Air Toxics - Statewide Pooled Emissions Study
- CARB Mobile Source Regulations
 - Advanced Clean Fleets Regulation
 - Zero Emission Forklift Regulation
- SCAQMD BACT/LAER Updates
 - Biogas/Pretreatment Combustion Devices
- Diesel Standby Generators

Statewide Wastewater Sector Two-Step Pooled Source Testing Study

David Rothbart, PE., BCEE



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California Air Resources Board (CARB) Air Toxics Requirements

Key Regulatory Drivers

AB 2588: Air Toxics "Hot Spots" Program (1987)

- Statewide inventory program for emissions from facilities
- Risk assessment requirements
- Public notification requirements
- Amended to expand reporting requirements

AB 617: Criteria Air Pollutant & Toxic Air Contaminant Reporting Regulation (CTR 2019)

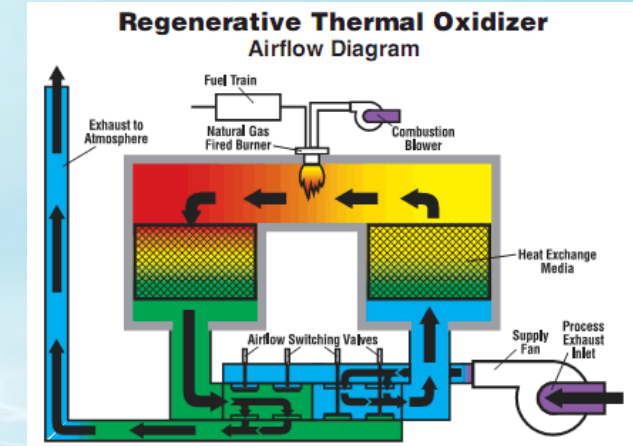
- Established statewide annual reporting of emissions data
- Improves transparency, uniformity and consistency statewide
- Emission data is used to understand emission sources

CARB Air Toxics Testing and Reporting Requirements

- On November 19, 2020, CARB amended:
 - Criteria & Toxics Reporting Regulation (CTR)
 - Emissions Inventory Criteria & Guidelines for Air Toxics "Hot Spots" Program (AB 2588)
- Amendments increase the list of toxics and number of facilities required to report
- AB 2588 list of air toxic compounds increased from about 700 to over 1,700 compounds **Current practice: test about 30 compounds**
- New requirements trigger the two-step testing process:
 - Step 1 - Tentatively identify air toxics
 - Step 2 - Quantify these air toxics
- Waste sector must submit 2028 data in 2029

Why are Air Toxics Important?

- Increased toxic emissions can trigger requirements to perform a health risk assessment
- If the health risk assessment shows an elevated cancer risk, costly risk reduction can be required, such as:
 - Replace existing combustion equipment
 - Install after-combustion controls
 - Cover open process and install scrubbers
- Negative public perception



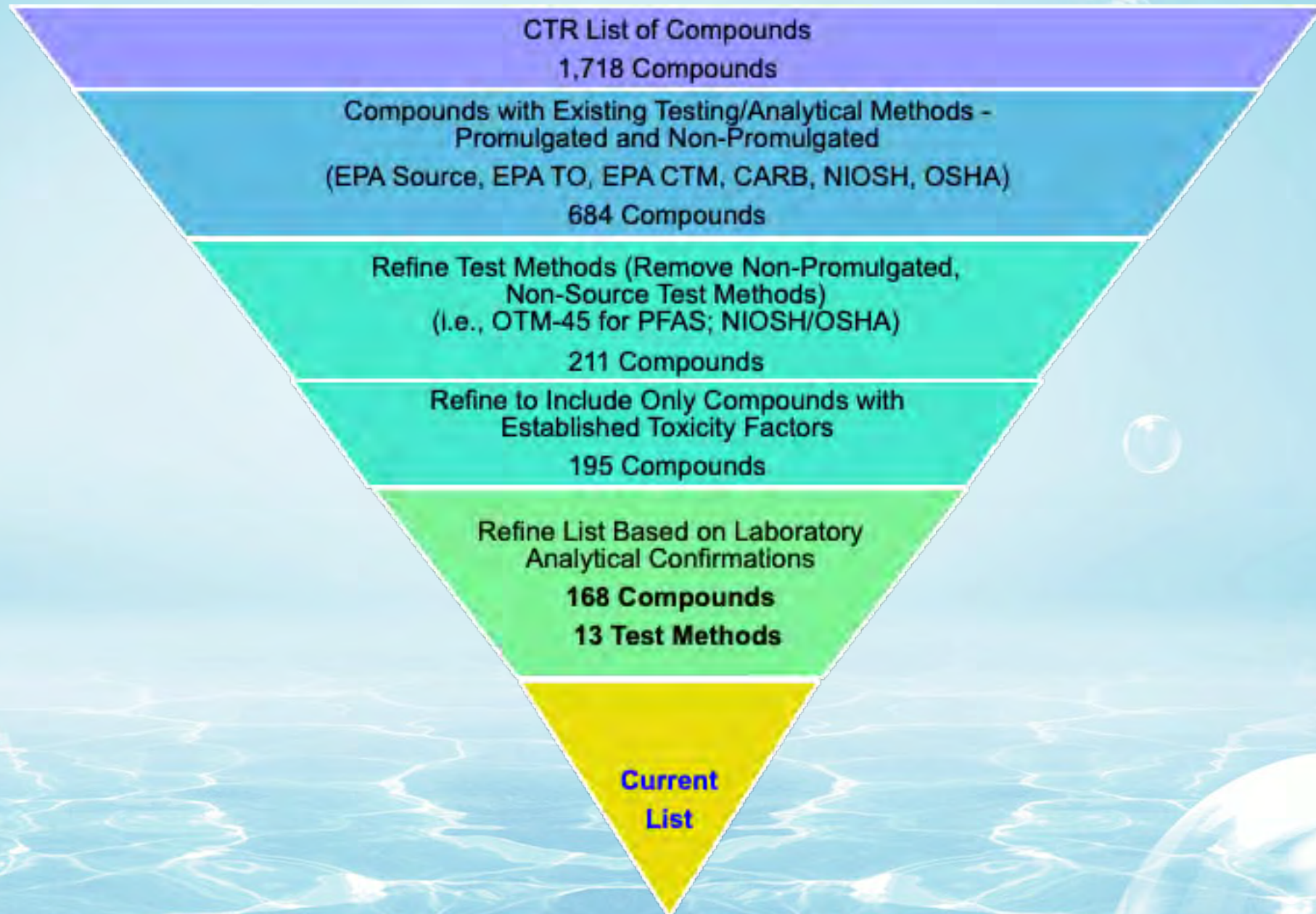
How to Ensure CARB's Requirements will be Implemented Fairly?

- A Steering Committee has been formed to represent the entire wastewater sector:
 - California Association of Sanitation Agencies (CASA): 2 members
 - Bay Area Clean Water Agencies (BACWA): 2 members
 - Central Valley Clean Water Association (CVCWA): 2 members
 - Clean Water SoCal: 2 members
- Retained Yorke Engineering to draft a two-step testing plan
- A Two-Step Pooled Source Testing Plan was transmitted to CAPCOA on November 19, 2025 for regulatory review and approval

Two-Step Pooled Source Testing Plan Proposal

- Obtain approval for statewide testing plan, including the following considerations **to produce best available data**:
 - **Test with approved methods** (unapproved methods may yield erroneous results and trigger retesting upon development of approved methods)
 - **Test for compounds with known toxicity** (obtained data cannot be used for risk-based decisions without compound toxicity)
 - **Test at six locations** within WWTPs
 - **Testing to be performed at:**
 - Two Industrial source influenced WWTPs
 - Two Residential WWTPs
 - Two Rural WWTPs
 - **Results to be used proportionally at any WWTP**

Compound Selection Criteria



Grouping 168 Compounds into Test Methods

Test Methods	No. of CTR Compounds	Class of Compounds
CARB 425	1	Hexavalent Chromium
CARB 426	1	Hydrogen Cyanide
EPA 8	1	Sulfuric Acid
EPA 23	56	Dioxins/Furans, PAH, PCB
EPA 26A	2	Chlorine, Bromine
EPA 29	19	Metals
EPA 320	4	Ammonia and Inorganic Acids
EPA 321	1	Hydrochloric Acid
EPA 326	4	Isocyanates
EPA TO-15	68	Volatiles
Mod. CARB 430	5	Aldehydes
Mod. EPA 308	1	Ethylene Glycol
SCAQMD 307-91	5	Reduced Sulfur Compounds

WWTP Selection: Toxics Mass Balance

Sources of Wastewater



Industrial Sources

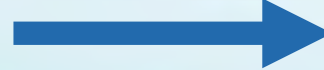


Residential/Commercial

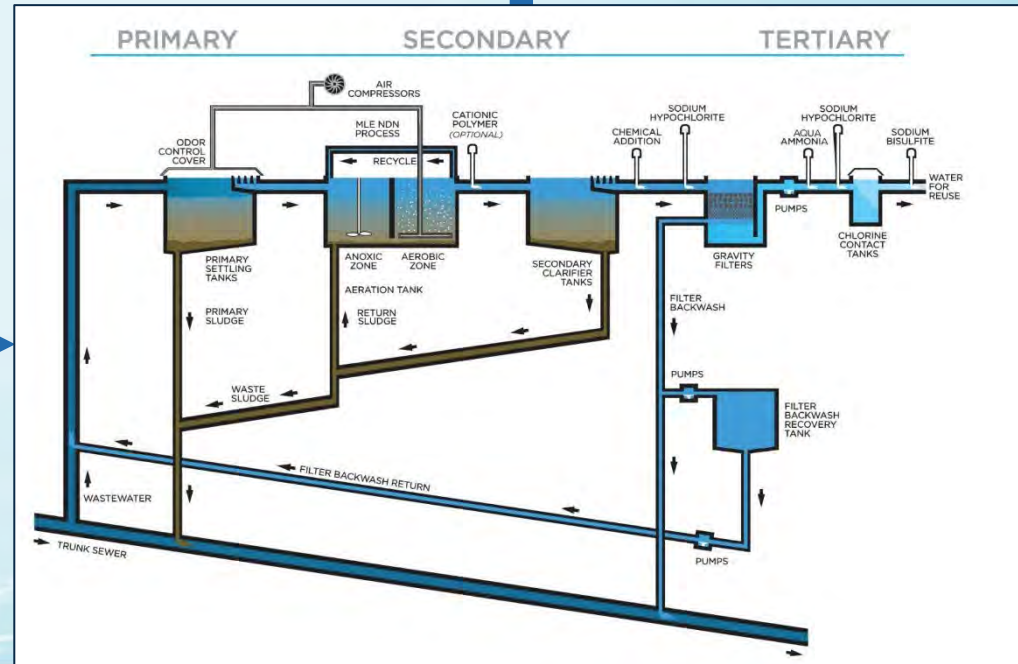


Rural

Toxics in Wastewater Influent



Potential Air Toxics



Wastewater Treatment Plant

Clean Effluent

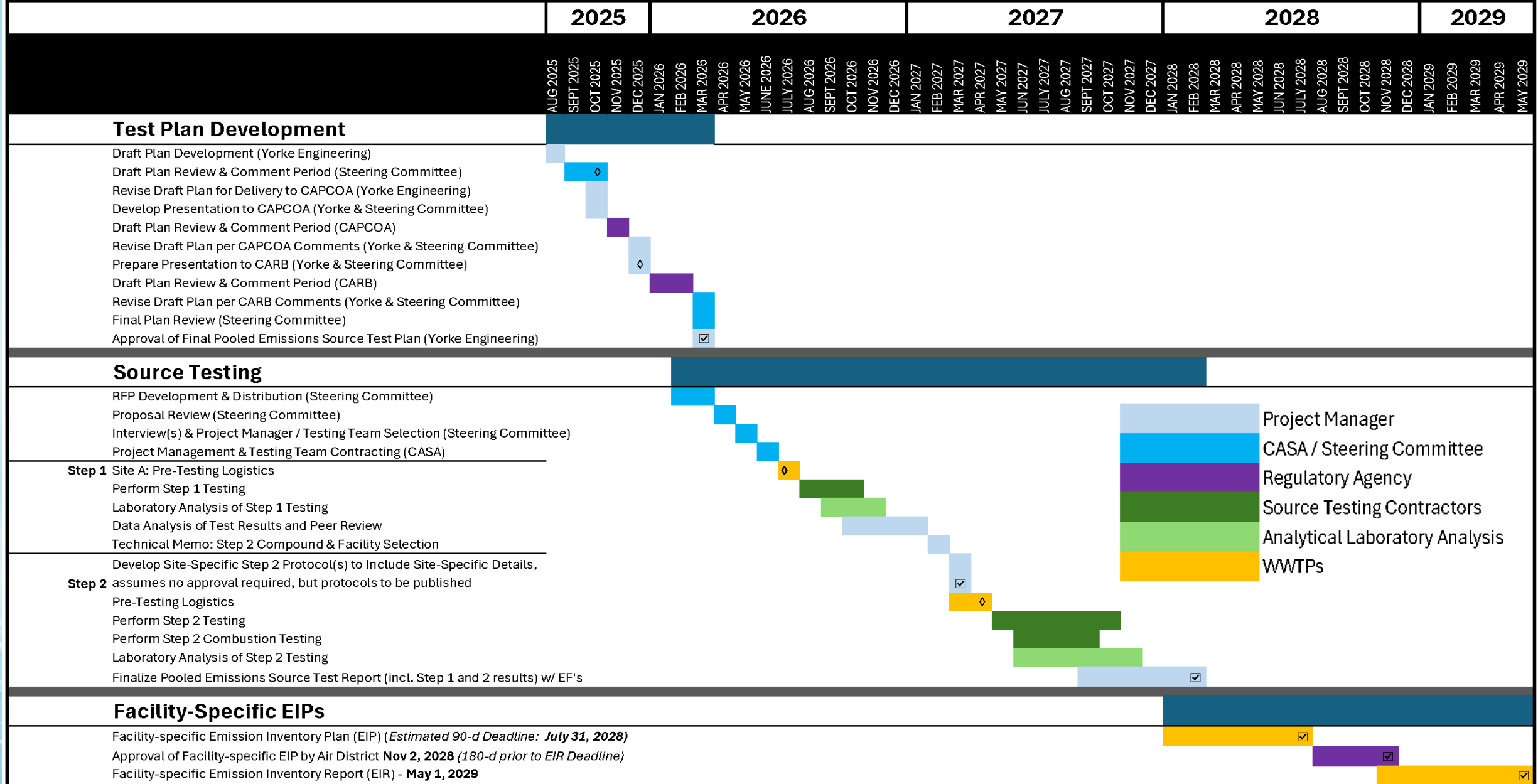


WWTP Sampling Locations to Test for Air Toxics

1. Primary – Influent Screening
2. Secondary – Activated Sludge
3. Advanced – Chlorination
4. Solids Thickening – Dissolved Air Flotation (DAF)
5. Biogas – Combustion
 - a. Internal combustion (engines)
 - b. External combustion (boilers)



Study Schedule



Extension Request



April 21, 2026

Ms. Melissa Venecek, PhD
California Air Resources Board
Air Quality Planning and Science Division
1001 I Street
Sacramento, CA 95814

Subject: Status of the Statewide Wastewater Sector Draft Two-Step Process Pooled Emissions Source Test Plan

Submitted via email: Melissa.Venecek@arb.ca.gov

Dear Ms. Venecek:

On November 19, 2025, the Municipal Wastewater Sector Steering Committee (Steering Committee) submitted a draft of the Two-Step Process Pooled Emissions Source Test Plan (Draft Plan) to the CAPCOA Uniformity Group for review. As specified in the Emission Inventory Criteria and Guidelines for the Air Toxics “Hot Spots” Program (EICG), the Draft Plan must undergo air district review prior to submittal to the California Air Resources Board (CARB). CAPCOA is currently reviewing the Draft Plan, and we anticipate receiving feedback in the near term.

Despite our best efforts to develop a compliant and scientifically defensible technical proposal suitable for regulatory review and approval, it has become clear that an extension to the EICG and Criteria and Toxics Reporting (CTR) deadlines will be necessary. We have previously communicated our concerns regarding the feasibility of completing the required testing across the wastewater sector within CARB’s established timelines, including shortly after adoption of these requirements.

The regulations require complex and time-intensive source testing across the entire wastewater sector. In response to these challenges, we retained Yorke Engineering to evaluate and develop an approach to conducting the required testing in a manner acceptable to both CAPCOA and CARB. Based on ongoing coordination and multiple discussions with CAPCOA and CARB staff, we believe the Draft Plan represents a reasonable and compliant testing program.

To help expedite implementation, we will be issuing a Request for Qualifications (RFQ) to identify qualified source testing contractors and analytical laboratories. We remain concerned about the limited availability of experienced contractors, as well as documented quality control challenges among laboratories performing routine air quality analyses in California. In addition to identifying qualified resources, the RFQ process will provide critical information needed to estimate the additional time required to complete the testing program.

We also note that the composting and landfill sectors will rely on many of the same contractors and laboratory resources as the wastewater sector. This overlapping demand will further constrain resource availability and is likely to create additional scheduling challenges.

Ms. Melissa Venecek
April 14, 2026
Page 2 of 2

Based on information obtained through the RFQ process, we would welcome the opportunity to meet with you to discuss a path forward for formalizing an appropriate extension. Given the shared resource constraints, it may be beneficial to include representatives from the composting and landfill sectors in this discussion.

Please let us know if you have any questions or your availability for a meeting. We look forward to continuing to work collaboratively with CARB to successfully implement this important and highly complex program.

Sincerely,

Sarah A. Deslauriers, PE, ENV SP
Director of Air, Climate, & Energy Programs

David L. Rothbart, P.E., BCEE
Senior Air Quality Advisor
Clean Water SoCal

cc: Adam Link – CASA, Executive Director
Alison Torres – CASA Member, Eastern Municipal Water District
Debbie Mackey – CVCWA, Executive Director
Jason Nettleton – BACWA Member, City of San Jose
Kristina Matthews – CVCWA Member, City of Fresno
Lorien Fono – BACWA, Executive Director
Steve Jepsen – Clean Water SoCal, Executive Director
Judy Yorke – Yorke Engineering
Bill Widger – CARB
Jason Aspell – CAPCOA
Brian Clements – CAPCOA

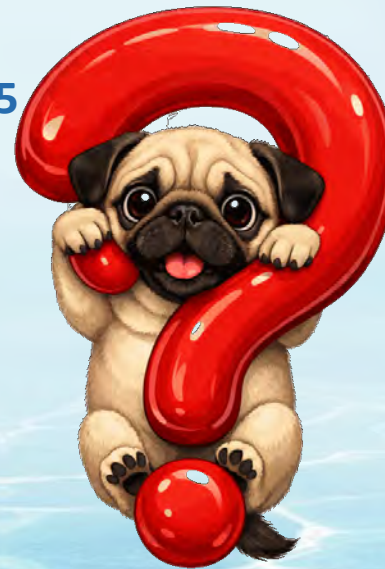
Statewide Wastewater Sector Two-Step Pooled Source Testing Study

Steering Committee

- Sarah Deslauriers, CASA
sdeslauriers@casaweb.org, (925) 705-6404
- Alison Torres, CASA
- Steve Jepsen, Clean Water SoCal
- David Rothbart, Clean Water SoCal
drothbart@cleanwatersocal.org (714) 878-9655
- Lorien Fono, BACWA
- Jason Nettleton, BACWA
- Debbie Mackey, CVCWA
- Kristina Matthews, CVCWA

Yorke Engineering Team

- Judy Yorke
- Nick Molzahn
- Greg Wolffe
- Brian Story



Questions?



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BACWA
BAY AREA
CLEAN WATER
AGENCIES



California Air Resources Board Advanced Clean Fleets Regulation

Alison Torres, Air Committee Chair



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CARB Advanced Clean Fleets (ACF)

- Adopted in 2023
- ACF is enforceable for state and local governments
- Applies to vehicles >8,500 lbs (medium- and heavy-duty)
- Plug in hybrids (NZEV) count as ZEV until 2035 – Not RNG/CNG vehicles
- There are a number of exemptions which require applications to be submitted and approved
- ACF is still enforceable for state and local governments (purchasers).



ACF: Regulatory Update

- Sept 2025- Amendments
 - CARB staff presented regulatory language to address [AB 1594](#)
 - Proposed additional changes
 - Delay 100% ZEV purchase schedule to 2030
 - Stakeholder comments supported the need for more changes
 - Board resolution approved
- April 2026 - 15-day Changes
 - 15-day changes released on April 2nd
 - Comments were due April 17th

ACF: Biogas Update

- 2023 ACF CARB Board resolution – Biomethane pathways and SB 1383 implementation
 - CARB staff have not acted on this resolution
- 2026 Update-
 - CASA/CWSC Advocacy
 - Meetings with board member pre-Sept 2025 hearing, and before 15 day change language was released
 - Very limited relief for biogas in 15-day regulatory package.
 - Wastewater Fleet/Captive Fleet Provisions are very restricted and not workable

ACF 15-day Changes-Summary of Changes

- Extended 100% ZEV Purchase requirement from 2027 to 2030
- Added option to switch between ZEV Purchase & ZEV Milestone until 2030
- ZEV Purchase, Daily Usage, and Fleet Resiliency Exemption
 - Added some clarifications and more criteria for evaluating ZEV availability
 - Removed “replacement” requirement; Require use of early purchase credits before eligible for exemptions
 - Require purchase plan to accompany exemption requests
- Modified “Mutual Aid Exemption” to “Fleet Resiliency Exemption”
 - Reduced eligibility criteria to 5% ZEVs; 25% exemption cap; Added mobile fueling evaluation effective in 2030
- Modified “Non-repairable” provisions to “Non-recoverable”
 - Modified used vehicle requirement
- Clarified rounding for ZEV purchases (allow carryover of 0.5 credit)
- Added Captive Biofuel Use Exemption/Low NOx ICE Vehicle
 - Limited to ZEV milestone; Restricted use

ACF 15-day Changes-Highlighted Concerns

- Captive Biofuel Use Exemption
 - Limited to ZEV milestone compliance pathway only
 - Must apply; restricted eligibility
 - Sunsets in 2035
 - Must meet limited criteria-“Excess gas” only; Fleet directly mandated by SB1383; Exclusive fueling at facility with excess gas production
 - Added “Low NOx ICE Vehicle” definition is ambiguous
- Hiring Entity language
 - Concerns with interpretation for contracted services such as biosolids hauling
- ZEV Purchase/Daily Usage/Fleet Resiliency Exemptions
 - Added annual purchase plan requirement
 - New Fleet Resiliency Exemption is capped at 25%

ACF Amendments-Next Steps

- Public comment period closed April 17th
- Stakeholders are requesting:
 - Another 15-day package
 - Presentation for changes to full board
- CARB Executive Officer expressed concerns about one-year statutory requirement to complete amendments (Sept 2026)

California Air Resources Board Zero Emission Forklift Regulation

Jennifer McMullin, Air Committee Vice Chair



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Large Spark-Ignition (LSI) Regulation

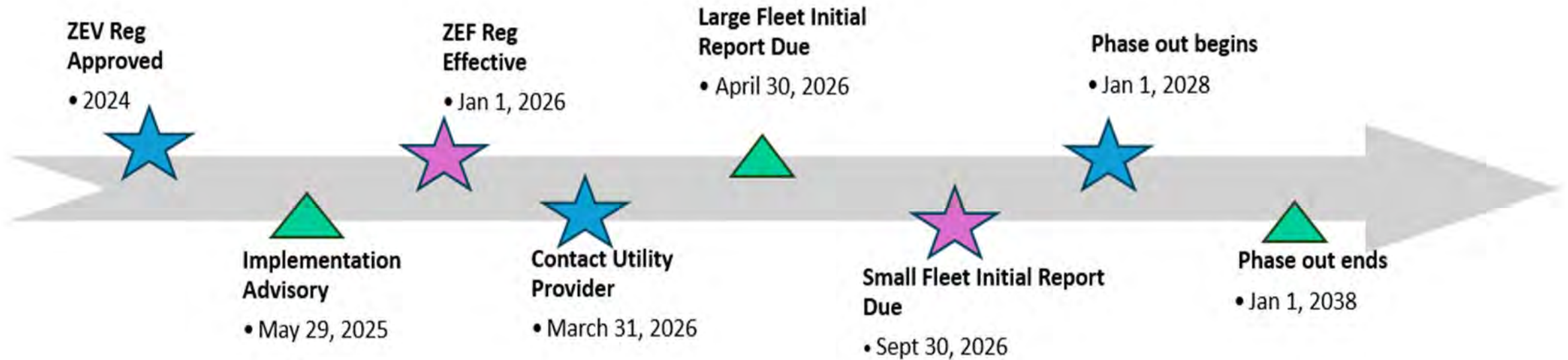
- Originally adopted in 2006, amended in 2016
- Applicable to fleets with more than 3 forklifts
 - Self propelled, ≥ 25 hp, tow tractors, airport equipment and sweeper scrubbers
 - Does not apply to diesel or small fleets ≤ 3
- Required fleet average emission levels to be met by 2013
 - Labeling
 - DOORS Reporting



Zero Emission Forklift Regulation Requirements

- Applicable to State and Local Government Fleets with (at least 1) Class IV or V LSI Forklifts < 12,000 lbs. lift capacity
- Requires both phase out of existing forklifts and purchase prohibitions to achieve emission reductions for CA
- 2028-2038 phase out by class, starting with older equipment
 - 50% cap on first compliance turnover date
- Contact utility provider in advance for electrical service installation
- Low-use and dedicated emergency use are exempt
- There are some extensions available

Zero Emission Forklift Regulation Timeline



South Coast Air Quality Management District Best Available Control Technologies (BACT) *Proposed BACT Updates*

Alison Torres, Air Committee Chair



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Proposed BACT Updates



LAER Update Process

Major Source Facilities:

Proposed LAER/ BACT Determinations

Minor Source Facilities:

Proposed BACT Determinations

Decouple LAER/BACT Adoption Process

- Decoupling allows faster publication of LAER while still updating BACT Guidelines through SRC and public engagement
- LAER is determined based on information at time of ***permit to construct issuance***
- SCAQMD Goals:
 - Assist Major Polluting Facilities in planning and reducing permitting delays
 - Enhance transparency for applicants
 - Enable more frequent updates to reflect new LAER listings
 - Maintain rigorous technical review while improving timelines for LAER listings

Major Polluting Facilities

Proposed Listings

- Linear Generators, Non-Emergency Electrical Generators, Natural Gas Fired

Emissions:

Emissions (ppmv)*	Proposed LAER Limits	Source Test Results @ Normal Load	
		Core 1	Core 2
NOx	2.5	1.40	2.09
CO	12	<2.07	<1.78
VOC	10	2.92	7.40



*15% O2 on a dry basis



Major Polluting Facilities

Proposed Listings

■ Landfill Gas Combustion and Sulfur Control System

Emissions:

Emission (ppmv)	Proposed LAER Limits	Maximum Concentration* Feb. 2024 – Sep. 2024
Total Sulfur as H ₂ S (Daily average)	85	69
Total Sulfur as H ₂ S (Monthly average)	60	59

* Based on facility Continuous Fuel Gas Monitoring System

■ Flare, Landfill Gas Fired

Emissions:

Emissions	Proposed LAER Limits	Source Test Results Range 2022 - 2025
VOC as Hexane (lb/MMBtu)	0.006	0.0023 - 0.0058
PM ₁₀ as PM (lb/MMSCF)	5	2.29 - 4.96



Major Polluting Facilities

Impact on Landfill Operations

- Legal/ Counsel Consultation (provided by LACSD)
- California Health and Safety Code Section 40440.11: Requires 5-step Analysis
 1. ...the south coast district shall consider only control options or emission limits to be applied to the basic production or process equipment existing in that source category or a similar source category.
 2. ...when a particular control alternative for one pollutant will increase emissions of one or more other pollutants, the south coast district's cost-effectiveness calculation for that particular control alternative shall include the cost of eliminating or reducing the increases in emissions of the other pollutants as required by the south coast district.
 3. ...the south coast district shall do all of the following:
 1. Identify one or more potential control alternatives that may constitute BACT, as defined in Section 40405
 2. Determine that the proposed emission limitation has been met by production equipment, control equipment, or a process that is commercially available for sale, and has achieved the best available control technology in practice on a comparable commercial operation for at least one year, or a period longer than one year if a longer period is reasonably necessary to demonstrate the operating and maintenance reliability, and costs, for an operating cycle of the production or control equipment or process
 3. Review the information developed to assess the cost-effectiveness of each potential control alternative.
 4. Calculate the incremental cost-effectiveness for each potential control option.
 5. Place the BACT revision for a source category proposed under this subdivision on the calendar of a regular meeting agenda of the south coast district board.
 4. ...the south coast district shall not establish an emission limit for best available control technology that is conditioned on the use of a particular control option unless the incremental cost-effectiveness value of that option is less than the district's established incremental cost-effectiveness value for each pollutant.
 5. After the south coast district determines what is BACT for a source, it shall not change that determination for that application for a period of at least one year from the date that an application for authority to construct was determined to be complete by the district....

Non-Major Polluting Facilities Proposed Listings

- **Linear Generators, Non-Emergency Electrical Generators, Natural Gas Fired**

Emissions:

Emissions (ppmv)*	Proposed LAER Limits	Source Test Results @ Normal Load	
		Core 1	Core 2
NOx	2.5	1.98	2.25
CO	12	2.51	2.24
VOC	10	7.48	8.87



* Based on facility Continuous Fuel Gas Monitoring System

Next Steps

- Next BACT Committee Meeting: May 28, 2026, 2:00 – 4:00pm
- 30-Day Public Comment Period (pending)
 - Continued engagement via CWSC prior to Stationary Source Committee
- Future Adoption:
 - SCAQMD BACT Presentation at SSC
 - SCAQMD Board Adoption

Emergency Diesel Generators

Steve Jepsen, Executive Director



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Emergency Diesel Generators

- Emergency, Stationary I.C. Engines (Major Source BACT)
 - September 2022, SCAQMD established Tier 4 Final emission standards as BACT/LAER for Stationary Emergency I.C. Engine-Compression Ignition ≥ 1000 BHP located at Major Polluting Facilities
 - Compliance with SCAQMD BACT/LAER can be achieved through multiple options:

Installing
Tier 4 Final
Certified I.C.
Engines

Installing
Tier 4 Compliant
Certified I.C.
Engines

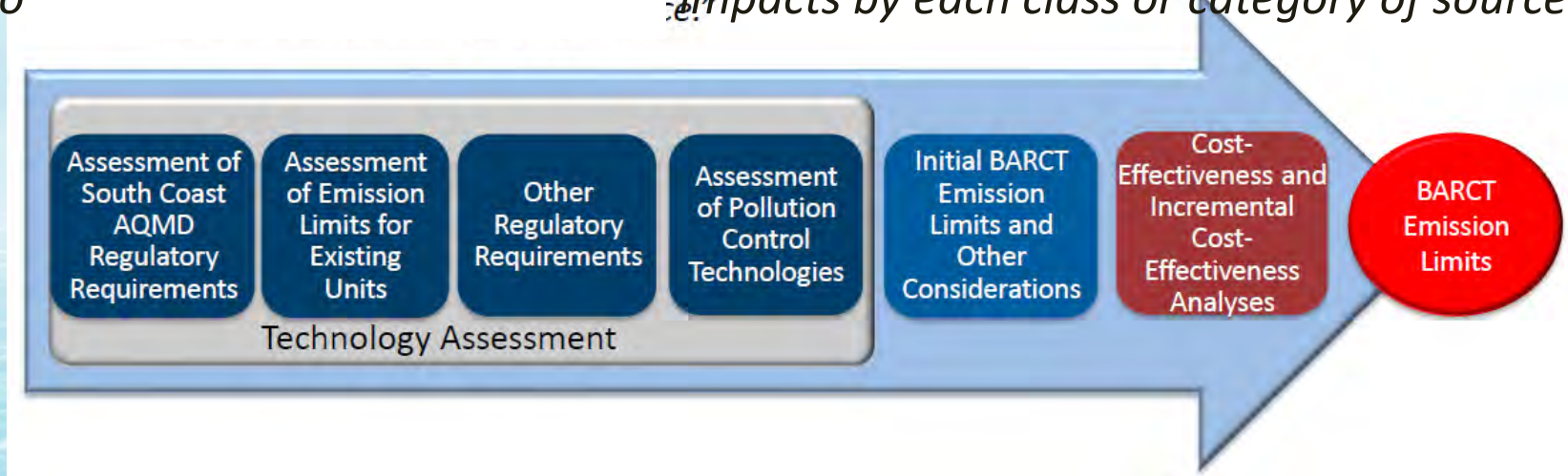
Retrofitting
U.S. EPA Certified
I.C. Engines, Non-
Tier 4F, to meet
Tier 4F emission
limits

SCAQMD Proposed Rule 1110.4 Emissions from Emergency Generators

- Rule still pending; No action since February 2024
- SCAQMD is conducting a Best Available Retrofit Control Technology (BARCT) Assessment

- BARCT defined in the CA Health and Safety Code Section 40406

“...an emission limitation that is based on the max degree of reduction achievable, taking into account environmental impacts by each class or category of source.”



Questions?



Air Quality Committee
March 26, 2025



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