

California Air Quality in 2023: What You Need to Know

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The 2023 Post-Covid, High Inflation Clean Air Regulatory Landscape



Inflation!! \$30??



**AB 617
Goals**



Topics – 2023 Air Quality Update

- Federal Regulations and Policies
- California State Regulations
 - The Net Zero Carbon Economy
 - Legislative Update
 - Summary of CARB Activities
 - AB 617 and Emissions
- Local Air District Regulations
- Summary

About BlueScape

- Consulting on air quality regulations in California since 1997
- Power generation & utilities, refineries, landfills, sand & gravel mining, oil & gas processing, chemical plants, aerospace, manufacturing
- Air Quality Services:
 - Impact Analysis: air emissions, air quality impact analysis, health risk assessment
 - CEQA air quality review for land use and industrial projects
 - Design air permits to maximize operational flexibility and reduce compliance burden; equipment controls
 - Solve tough air regulation compliance problems



Federal Regulations & Policies Update 2023

Federal/EPA Regulations & Policies

- Clean Energy and Climate Change
- Attainment of Criteria Pollutant Standards
 - 2015 Ozone Standard Implementation Plan Status
 - New proposed standards for fine particulate matter (1/6/23)
- Federal New Source Review Permitting
 - Principles for Addressing Environmental Justice in Air Permitting (12/22/22)
 - Rescinded 2017 Memo on Use of the Actual-to-Potential Test (12/9/22)
 - Proposed Reconsideration of Fugitive Emissions Rule for Major Sources in Nonattainment Areas (10/24/22)
 - Guidance for Ozone and Fine Particulate Permit Modeling (7/29/22)
- Toxics Release Inventory (TRI)
 - Proposed Rule to add PFAS to TRI
 - 12 chemicals added (11/30/22)



California Regulatory Update 2023

POLL – What will most impact your operations or projects in 2023?

- New air emissions inventory requirements
- New or amended Air District equipment standards for NOx, VOC, PM emissions
- California Environmental Quality Act regulation
- AB 617 Community Air Protection Program requirements
- State or Air District air toxics Regulations
- State greenhouse gas or energy regulations

California State Air Quality Regulations

- Net-Zero Carbon Economy Update
- New rules in 2022; 2023-2024 Legislative Session Update
- Air Resources Board Regulations
 - Summary of CARB activities
 - AB 617 Community Air Protection Program
 - The air emissions reporting universe in 2023
- CEQA Air Quality and Greenhouse Gas Review
- Update on technical tools

Net-Zero Carbon Economy Update

Federal Actions

- Bipartisan Infrastructure Act (2021)
- Inflation Reduction Act of 2022
- The Industrial Demonstrations Program (March 2023)
- The Greenhouse Gas Reduction Fund (Feb 2023)
- Deployment of Clean Vehicles
 - More stringent GHG emission standards
 - Expansion of EVs and EV infrastructure

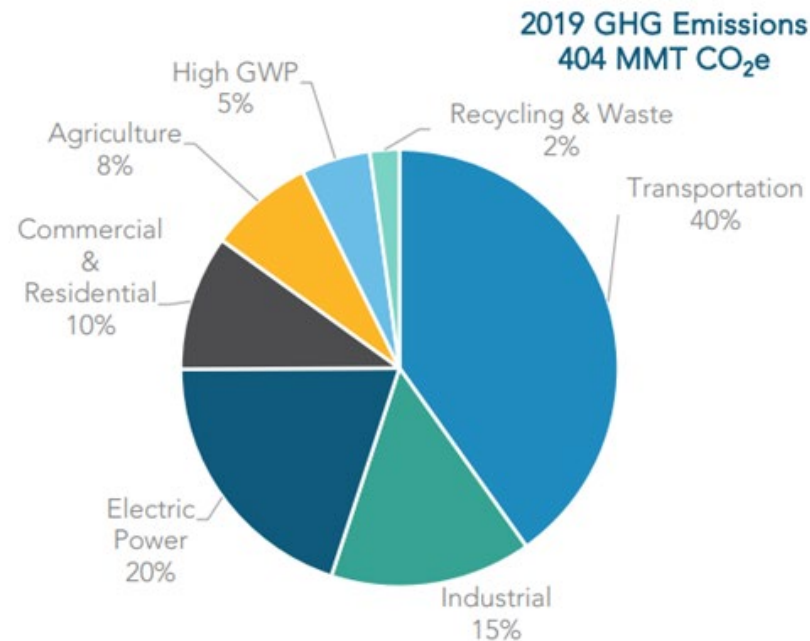
California's 2022 Scoping Plan for Achieving Carbon Neutrality

- AB 32 (2008): reducing GHG emissions to 1990 levels by 2020 – achieved in 2016
- SB 32 (2017): reduction target of at least 40% below 1990 emissions by 2030
- The California Crisis Act, AB 1279 (2022) lays out a path to achieve targets for carbon neutrality and reduce GHG emissions by 85% below 1990 levels no later than 2045

Key Sectors for Decarbonization

- Transportation
- Infrastructure & Buildings
- Industry

Figure 1-8: 2019 State GHG emission contributions by Scoping Plan sector¹¹⁴



Decarbonizing Transportation

- ZEV Regulations
 - EO N-79-20 Zero Emission Vehicles (ZEV) (Sept 2020)
 - Advanced Clean Cars II and Advanced Clean Trucks Acts
 - Innovative Clean Transit (ICT) Regulations
 - Zero-emission bus requirements starting in 2023
- EV Infrastructure Regulations
 - 2022 CALGreen Code
 - AB 1738
- Reducing VMT
 - SB 743 (2020): Reducing Vehicle Miles Traveled (VMT)
 - SD County established VMT threshold (TSG guidelines Sept 2022)

Decarbonizing Buildings & Infrastructure

- Renewables powered Utilities
 - 100% Clean Energy Act for Utilities (SB100, 2018)
 - 100% clean energy by 2045 for all retail electricity
 - RPS of 60% by 2030
- Electrification of buildings
 - 2022 CALGreen Code
 - 70+ cities and counties in CA now requiring or encouraging new homes to be all electric
 - CARB plans to phase out natural gas use from space and water heaters by 2030
- Regional Examples
 - City of San Diego Climate Action Plan (2022)
 - City of Encinitas Green Building Ordinance (2022)

Decarbonization in the Industrial Sector

- CA Cap and Trade Program
 - CARB holding workshops to inform potential regulatory amendments to Cap and Trade in 2023
- SB 905 (2022) – carbon dioxide sequestration and removal
- SB 596 (2021) – net-zero emissions strategy for the cement sector

2021-2022 Session

Energy, Air Quality & Climate¹

LAWS	DESCRIPTION
AB 525	Offshore Wind Generation
AB 619	Air Quality Health Plan for Wildfires
AB 1279	Climate Crisis Act
AB 1738	Building Standards: Installation of Electric Vehicle Charging Stations
AB 1749	Community Reduction Programs: Toxics and Criteria Pollutants
AB 1757	Global Warming Solutions Act: Natural and Working Lands
AB 2101	Carbon Sequestration including Whole Orchards
AB 2446	Embodied Carbon Emissions: Construction Materials
SB 596	Greenhouse Gases: Cement Sector Net-Zero
SB 905	Carbon Sequestration
SB 1020	Clean Energy, Jobs and Affordability Act of 2022
SB 1145	Online Dashboard for Climate Progress

¹CARB 2021-2022 Air Quality and Climate Legislation

California Legislative Session 2023-2024

- 2023-2024 Legislative Deadlines:
 - Feb 17 new bills introduced
 - June 2 Pass out of house of origin
 - Sep 14 Legislature Pass
 - Oct 14 Governor Sign or Veto
- Track at www.legiscan or <https://leginfo.legislature.ca.gov/>

California Air Resources Board Update

- Community Air Protection Program (CAPP) (update 2/23/23)
- 2022 GHG Scoping Plan (eff 12/15/22)
- Advanced Clean Cars II Regulation (eff 11/30/22)
- Proposed In-Use Off-Road Diesel-Fueled Fleets Regulation Amendments (11/17/22)
- Proposed In-Use Locomotive Regulation (comments by 3/16/23)
- Proposed Amendments to the Chromium Plating Airborne Toxic Control Measures (ATCM)
- Proposed Advance Clean Fleets Regulation (hearing 10/27/22)
- Proposed 2022 Amendments to Area Designations for State Ambient Air Quality Standards (hearing 1/26/23)
- Funding Plan for Clean Transportation Incentives - \$2.6B (11/17/22)
- 2022 State Implementation Strategy for 8-hr Ozone (9/22/22)

Links: ww2.arb.ca.gov/rulemaking-activity;
ww2.arb.ca.gov/our-work/programs/board-meetings



AB 617 Community Air Protection Program (CAPP) Update

Key CAPP Elements:

1. Selected Communities – CERPs and CAMPs
2. Statewide emission reduction measures
3. Expedited Best Available Retrofit Technology (BARCT)
4. Statewide transparency tools and partnerships
5. Criteria Toxics Reporting (CTR) Regulation

CERP = Community Emissions Reduction Plan

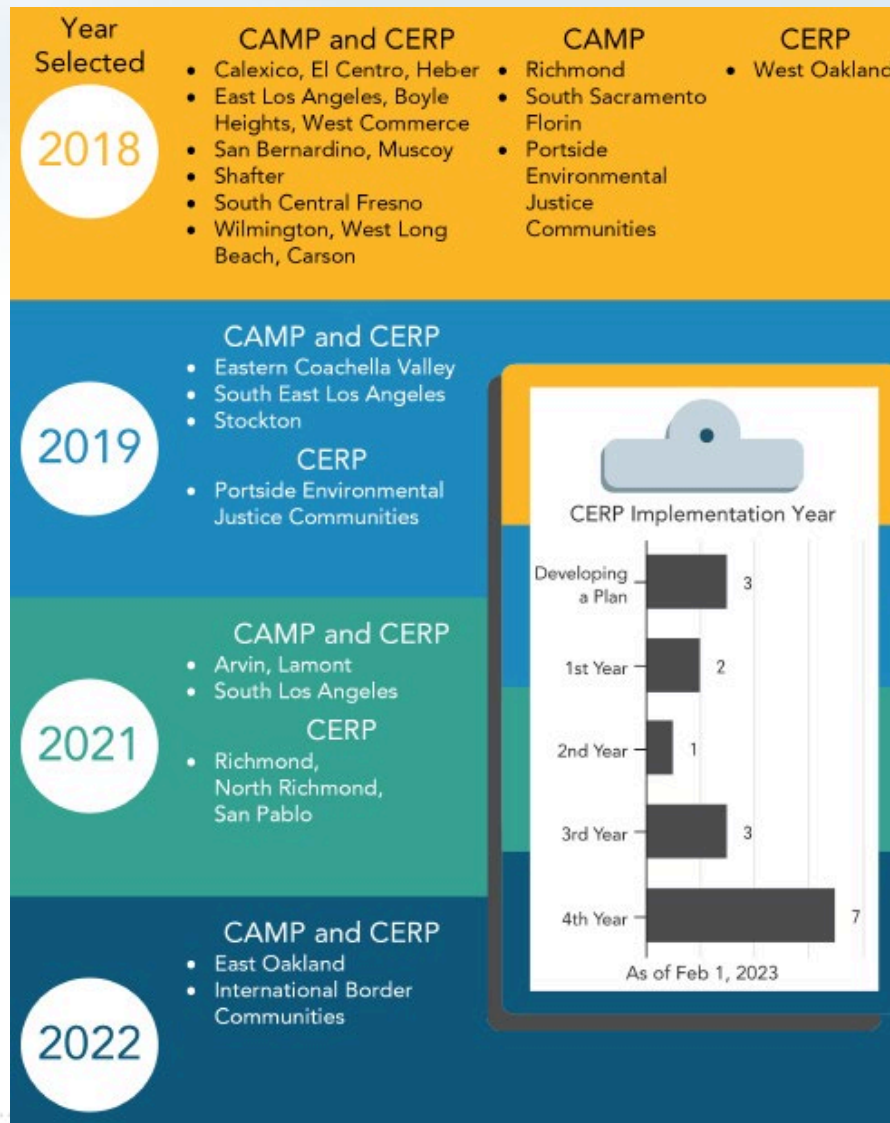
CAMP = Community Air Monitoring Program

Ref: [ww2.arb.ca.gov/sites/default/files/2023-](http://ww2.arb.ca.gov/sites/default/files/2023-02/AnnualUpdateBoardMemo_Attachments_DRAFT.pdf)

[02/AnnualUpdateBoardMemo_Attachments_DRAFT.pdf](http://ww2.arb.ca.gov/sites/default/files/2023-02/AnnualUpdateBoardMemo_Attachments_DRAFT.pdf)



CAPP Communities



Added for 2023,
5th Year:

1. Hunters Point / SE SF
2. North Imperial Phase 1

CAPP Communities (con't)



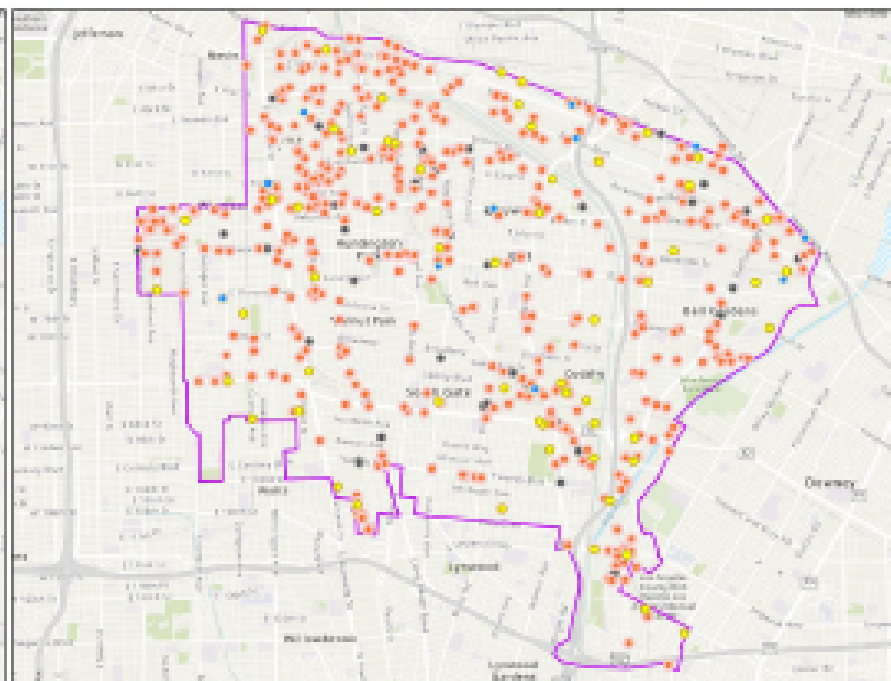
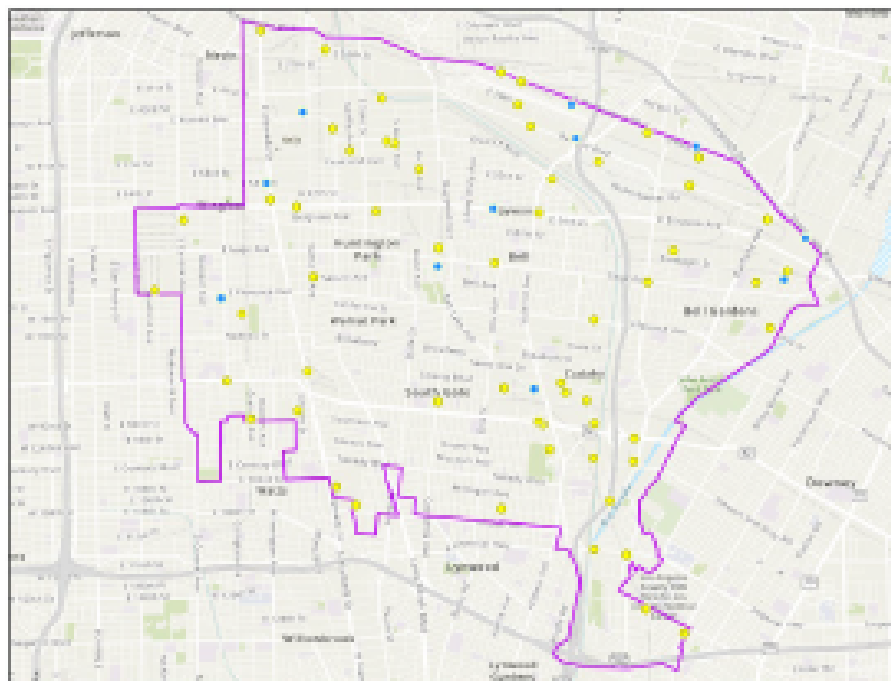
CAPP - State Measures

Statewide Measures from Blueprint – Appendix F	Status
<i>Commercial Harbor Craft Amendment</i>	Adopted
<i>Cargo Handling Equipment Amendment</i>	Initiated
<i>Chrome Plating Control Measure Amendments</i>	Initiated
<i>Commercial Cooking Suggested Control Measure</i>	Initiated
<i>Composite Wood Products Control Measure Amendments</i>	Initiated
<i>In-Use Locomotive Regulation</i>	Initiated

CAPP State Measures (con't)

Additional Statewide Measures	Status
<i>Advanced Clean Cars 2</i>	Adopted
<i>Advanced Clean Trucks</i>	Adopted
<i>Advanced Clean Fleets</i>	Initiated
<i>Ocean-Going Vessels At Berth Regulation</i>	Adopted
<i>Heavy-Duty "Omnibus" Low NOx Rulemaking</i>	Adopted
<i>Heavy-Duty Inspection and Maintenance</i>	Adopted
<i>Proposed Amendments to the Small Off-Road Engine Regulations: Transition to Zero Emissions</i>	Adopted
<i>Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel Fueled Transport Refrigeration Units (TRU)</i>	Adopted
<i>National Locomotives Standards Petition</i>	Adopted
<i>2019 Amendments to the Low Carbon Fuel Standard (LCFS)</i>	Adopted
<i>On-Board Diagnostic II Program</i>	Adopted
<i>Real Emissions Assessment Logging System</i>	Adopted
<i>Short-Lived Climate Pollutant Reduction Strategy</i>	Adopted
<i>Zero Emission Off-Road Forklift Regulation</i>	Initiated
<i>Off-Road Diesel Engine Emission Standards: Tier 5</i>	Initiated

CAPP Criteria and Toxics Reporting (CTR) Regulation



The blue dots on this map represent the facilities that are currently on CARB's pollution mapping tool. The yellow dots are additional facilities for which emissions data are available on CARB's Facility Search Tool website.

The dots on this map represent additional facilities for which emissions data will be available by 2027, when CTR is fully implemented.

the air emissions reporting universe

- Emission Inventory Criteria and Guidelines (EICG) Regulation or AB 2588 “Hot Spots”
- Criteria Pollutant and Toxics Emissions Reporting (CTR) Regulation
- Air District or USEPA emissions programs

NASA, ESA, CSA, JUDY SCHMIDT (CC BY 2.0)

EICG: ww2.arb.ca.gov/our-work/programs/ab-2588-air-toxics-hot-spots/hot-spots-inventory-guidelines

CTR: ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting



EICG, CTR and the Phase-In

So ask yourself, for 2022 is your facility:

1. EICG Regulation (aka AB 2588 or “Hot Spots”); every four years
2. CTR Regulation
 - “Core” – GHG Facility, Criteria Facility, Elevated Toxics
 - Additional CTR reporting Phase-In, or “Not Core”
3. Air District or EPA reporting only
4. None of the above

How do you know where you are?

CTR Phase-In 2022 and Onward

Table 5. GHG, Criteria, and Elevated Toxics Facility Reporting

Facility Type	Data Year						
	2022	2023	2024	2025	2026	2027	2028+
GHG	X	X	X	X	X	X	X
Criteria	X	X	X	X	X	X	X
Elevated Toxics	X	X	X	X	X	X	X

Table 2. District Grouping

District Group A	District Group B
Bay Area AQMD, Imperial County APCD, Sacramento Metropolitan AQMD, San Diego County APCD, San Joaquin Valley APCD, South Coast AQMD	All other districts

Table 3. Phase-In Summary

District Group	Facility Category	Data Year						
		2022	2023	2024	2025	2026	2027	2028+
A	>4 tpy	X	NNR	NNR	NNR	X	X	X
	Phase 1	X	NNR	NNR	NNR	X	X	X
	Phase 2			X	NNR	X	X	X
	Phase 3				X	X	X	X
B	>10 tpy			X	NNR	NNR	NNR	X
	Phase 1			X	NNR	NNR	NNR	X
	Phase 2					X	NNR	X
	Phase 3						X	X

NNR = No new CTR reporting requirements; follow existing reporting requirements (e.g., district, NEI).

Emission Inventory (EI) Requirements - Tips

- CTR deadline is coming fast – May 1, 2023
- EICG – generally must do it
- CTR and you got a letter – must do it? *not necessarily*
- Check *additional CTR applicability* carefully
- New information – new processes, 700+ chemicals, may need source location and parameters
- You may be able to do abbreviated reporting
- Know how your local Air District implements updated EICG and CTR, as well as other inventory requirements
- Not complete, could be more accurate, guesstimates? – *don't sweat it, submit it!*
- Late? Probably ok, just get it in ASAP

Emission Inventory (EI) Requirements

When to get help?

- EICG Toxics Inventory is required, especially if highly toxic emissions
- Complicated facilities and processes; updating past EIs
- Facilities with an agency compliance or community complaint history
- In a CAPP community with an Emission Reduction Plan
- Guidance to complete CTR applicability review
- Air Permit modifications; accurate past statements important
- Review the inventory, respond to Air District comments
- Some place you'd rather be ...?

CEQA Air Quality and GHG Review Update

- Status of CEQA State and Local Guidelines
 - 2018 CEQA Guidelines
 - SB 743 Transportation Impacts
- Significance Thresholds
 - BAAQMD GHG Thresholds
 - South Coast AQMD Cumulative Health Risk Impacts
- Friant Ranch Update
- Recent Project Cases
 - League to Save Lake Tahoe Mountain Preservation Foundation v. County of Placer (75 Cal. App. 5th 63)

Air Quality & GHG Analysis

Update on Technical Tools

- New CalEEMod web v2022.1.1.6 emissions model (user's guide April 2022)
- CARB Mobile Source Emissions Inventory (MSEI) Modeling Tools
 - EMFAC 2021 (EPA approved)
 - CARB SAFE adjustment removed
 - OFFROAD2021 Database
- AERMOD dispersion model v22112
 - Bug fixes to v.21112 options
 - New Alpha and Beta options for building downwash and offshore platforms
 - AERMOD Implementation Guide (June 2022) – epa.gov/SCRAM
- Air Toxics Health Risk Assessment (HRA)
 - CARB Consolidated list HRA health values 12/9/22
ww2.arb.ca.gov/sites/default/files/classic/toxics/healthval/contable12092022.pdf
 - HARP2 dated 4/28/22
- CalEnviroScreen 4.0

Air District Regulatory Update

South Coast AQMD – 2023 Update

- 2022 Air Quality Management Plan (AQMP - 12/2/22)¹
 - Highest levels of smog in nation, despite progress
 - NOx to meet ozone standard – 67% more than required in 2037
 - Greater focus on zero emission technologies
- New and amended Rules in 2022 (sample)²

Rule #	Description	Adoption Date
1107	Coating of Metal Parts & Products	1/6/2023
1118	Control of Emissions from Refinery Flares	1/6/2023
1168	Adhesive & Sealant Application	11/4/2022
1460 (New)	Particulate from Metal Recycling & Shredding Operations	11/4/2022
218.2 & 218.3	Continuous Emissions Monitoring	9/2/2022
1480	Monitoring & Sampling of Metal Toxic Air Contaminants	5/6/2022
1134	Emissions of NOx from Turbines	2/4/2022
219	Equipment not Requiring a Permit	1/7/2022

- WAIRE Rule Implementation³
- What about RECLAIM program sunseting?⁴

¹www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

²www.aqmd.gov/home/rules-compliance/rules/recent-actions

³www.aqmd.gov/home/rules-compliance/compliance/waire-program#

⁴www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/regxx/reclaim---wgm-november-2022-final.pdf?sfvrsn=6



South Coast AQMD – 2023 Update (con't)

- Proposed New and Amended Rules:

Rule No.	Description	Status
PAR 219 & 222	Equipment not Requiring a Written Permit; Filing Requirements for Specific Emission Sources	3/3/23 Continuance, 30-day docs
Regulation XIII	New Source Review	11/10/22 – Working Group
PR 1110.3 <i>(New)</i>	Emissions from Linear Generators	2/23/23 - Working group #3
PAR Rule 1135	NOx from Electric Generating Facilities	2/22/23 – Public Workshop
PAR 1148.2	Notification and Reporting for Oil and Gas Wells and Chemical Suppliers	1/3/23 Updated 30-day documents
PAR 1153.1	NOx from Commercial Food Ovens	3/8/23 - Working Group #7
PR 1159.1 <i>(New)</i>	NOx from Nitric Acid Tanks	1/13/23 - Survey Form
PAR 1178 & PAR 463	VOC Emissions from Storage Tanks at Petroleum Facilities & Organic Liquid Loading	3/1/23 - Public Workshop
PAR 1180	Fenceline and Community Monitoring	1/25/23 - Working Group #1
PAR 1401.1	New and Relocated Facilities Near Schools	1/31/23 - 30-day documents
PR 1405 <i>(New)</i>	Ethylene Oxide and Chlorofluorocarbon from Sterilization or Fumigation	2/16/23 - Working Group #5
PR 1455 <i>(New)</i>	Hexavalent Chromium from Torch Cutting and Welding	3/15/23 - Working Group #1
	Indirect Source Rules – Marine Ports and New Intermodal Facilities	

- 2023 Rule & Control Measure Forecast: 3/3/23 Governing Board
- BACT SRC Committee Meeting – Feb 23rd, 2023 (latest updates adopted 9/2/22)



San Joaquin Valley APCD

- Attainment Planning
 - 2023 Plan for the 2012 Annual PM2.5 Standard (3/23/23)
 - 2022 Ozone Plan for the 2015 8-hr standard – working group (3/7/22)
- Rule Developments in 2022 and 2023:
 - Workshop on Wood Burning Fireplaces and Stoves Rule 4901 and other Potential Amendments (3/22/23)
 - New and Modified Stationary Source Workshop – Rules 2201 and 2301 (2/15/23)
 - Refinery Fenceline Monitoring - Rules 4460 and 3200 Adopted (10/22/22)
 - Update on BARCT Rule Evaluation (10/28/22)
 - Flare Rule Amendments take effect - Rule 4311 (Aug 2022)
- 2023 Legislative Platform
- Guidance Documents
 - Best Available Control Technology (BACT) - 6/1/22
 - Ag IC Engine Certification Policy 9/14/22

Other Air Districts (update)

- Bay Area AQMD
 - Amended Rules; NOx from Fan Type Central Furnaces (Rule 9-4) and Natural Gas-Fired Boilers/Heaters (Rule 9-6) – Board Mtg 3/15/23
 - Proposed Risk Management Methodology for PM2.5 (11/9/22)
 - Amendments to Reg 2 Rule 5 for Toxics and Air Permits; overburdened communities (7/1/22)
 - Permitting Program Enhancements Webinar (3/7/22)
- San Diego APCD
 - New Governing Board via AB 423
 - 2022 Regional Air Quality Strategy (RAQS - adopted 3/9/23)
 - Severe Nonattainment for Ozone; lower major source for major new source permits and Title V thresholds
 - Landfill Gas Flares Rule 69.7 (eff. 3/9/23)
 - Rule 11 Exemptions Amended (10/13/22)

2023 Air Quality in California - Summary

- “Out” of Covid into a Post-Covid world
- Clean Air means progress on the Net Zero Carbon Economy:
 - CARB and Air Districts working closely together
 - Meet ozone standards and reducing fine particulate matter
 - Zero emission cars, trucks, buses; phase-in starting
 - Climate change goals: renewable energy, decarbonized buildings, petroleum fuel phase-out
 - Addressing overburdened communities, air toxics impacts and diesel PM emissions reduction
 - Greater monitoring near refineries and other industries
- Large expansion in Emission Inventories, public information
- Going deep with AB 617 implementation; more communities and programs
- Call us with questions on developing air quality regulations!

CONTACT / QUESTIONS



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