

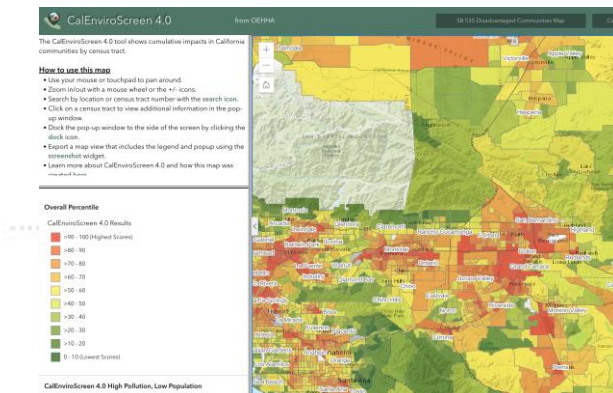


California Air Quality in 2024: What You Need to Know

January 30, 2024
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The 2024 Air Quality Landscape



Topics – 2024 Air Quality Update

- Federal Regulations and Policies
- California State Regulations
 - Legislative Update
 - Summary of CARB Activities
 - Emissions Inventories
 - CEQA Regulations and Technical Tools
- 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, auto manufacturing
- Air Quality Services:
 - Air permits: design to maximize operational flexibility and reduce compliance burden; equipment controls
 - Impact Analysis: air emissions, air quality impact analysis, health risk assessment
 - CEQA air quality review for land use and industrial projects
 - Solve tough air regulation compliance problems



Federal Regulations and Policies Update 2024

Federal Actions in 2023

- Inflation Reduction & Bipartisan Infrastructure Act Status¹
- Proposed Multi-Pollutant Emission Standards Light- and Medium-Duty Vehicles (4/12/23)
 - Phase-in 2027-2032; fleet-based standard
 - Builds on GHG standards for 2023-2026 vehicles
 - Estimated 67% new models ZEV by 2032
 - Expect rule to be finalized in 2024
- Attainment of Criteria Pollutant Standards

¹www.nrcs.usda.gov/sites/default/files/2023-11/ira-climate-california.pdf

Federal/EPA Regulations & Policies

- Federal New Source Review Permitting
 - EPA Proposed Rule for Major to Area Sources – Reclassification (9/27/23)
 - Proposed Revisions to the Guideline on Air Quality Models (10/23/23)
- Source-Specific Standards – NSPS and NESHAPs
 - www.epa.gov/stationary-sources-air-pollution/new-source-performance-standards
 - www.epa.gov/stationary-sources-air-pollution/national-emission-standards-hazardous-air-pollutants-neshap-8
- EPA Fiscal Budget for 2024
 - www.epa.gov/system/files/documents/2023-03/fy-2024-congressional-justification-all-tabs.pdf

Supreme Court in 2024

- Sackett v. EPA (5/25/23), *challenge to: Clean Water Act extends to wetlands connected to navigable waters.*



- Loper Bright Ent. V. Raimondo and Relentless Inc. v. Dept. Commerce, *challenge to:*

Chevron v. NRDC, 467 U.S. 837 (1984):

A government agency must conform to any clear legislative statements when interpreting and applying a law, but courts will give the agency deference in ambiguous situations as long as its interpretation is reasonable (ref. supreme.justia.com/cases/federal/us/467/837)

POLL – What will most impact your operations or projects in 2024?

- California air emissions inventory requirements
- New or amended EPA, CARB or Air District equipment standards
- California Environmental Quality Act regulation
- Legal challenges to project development
- Phase-in of state greenhouse gas or energy regulations

California Regulatory Update 2024

California State Air Quality Regulations

- New rules in 2024; 2023-2024 Legislative Session Update
- SB 253; Climate Corporate Data Accountability Act
- Status of Onroad/Offroad Emission Reduction Regulations
- Environmental Justice Initiatives
- State 2024 Air Emissions Reporting Regulations
- CEQA Air Quality and Greenhouse Gas Review
- Update on Technical Tools

Energy, Air Quality & Climate Laws Passed in 2023¹

LAWS	DESCRIPTION
AB 43	GHGs: Building Materials: Embodied Carbon Trading System
AB 579	Schoolbuses: Zero-Emission Vehicles
AB 1216	Wastewater Treatment Plants: Monitoring of Air Pollutants
AB 1594	Medium and Heavy-Duty Zero-emission Vehicles; Public Agency Utilities
AB 1305	Voluntary Carbon Market Disclosures
SB 253	Climate Corporate Data Accountability Act
SB 261	GHG gases: Climate-Related Financial Risk

¹CARB 2023-2024 Air Quality and Climate Legislation

California Legislative Session 2023-2024

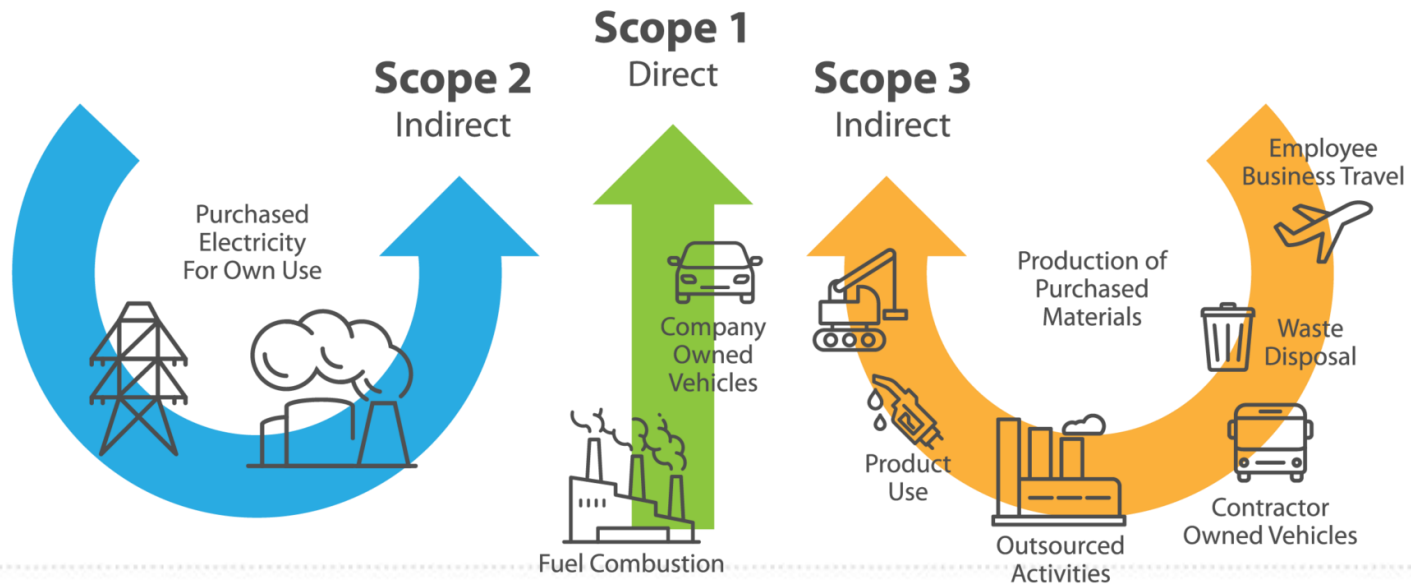
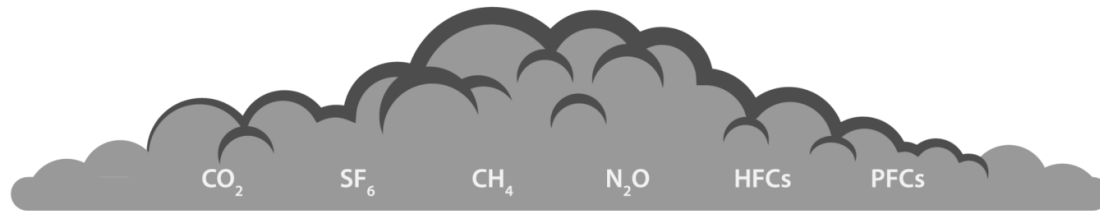
- 2023-2024 Legislative Deadlines:
 - Feb 16 new bills introduced
 - May 24 Pass out of house of origin
 - Aug 31 Legislature Pass
 - Sept 30 Governor Sign or Veto
- Track at www.legiscan or <https://leginfo.legislature.ca.gov/>

SB 253 – Climate Corporate Data Accountability Act

- Mandatory annual GHG reporting for entities with revenues > \$1 billion, starting in 2026
- Emissions will be disclosed to a nonprofit emissions reporting organization contracted by the state
- Third-party verification is mandatory
- Non-compliance will result in administrative penalties
 - Fines not to exceed \$500,000 per reporting year

SB 253 Required Reporting

GHG Emissions Scope	Scope 1	Scope 2	Scope 3
Initial Reporting Year	2026	2026	2027



Advanced Clean Fleets Regulation

- Large-scale transition to zero-emissions medium and heavy-duty vehicles
- Only zero-emission drayage trucks can be newly registered by CARB starting in 2024, all required to be ZEV by 2035
- High Priority fleets must phase out ICE using the model year schedule or ZEV Milestone Schedule

Model Year Schedule			
2024	2025	2035	2036
Fleets may only purchase ZEVs or near ZEVs	start removal of non-ZEVs at the end of their life	Fleets may only purchase ZEVs.	Manufacturers may only sell ZE medium and heavy-duty trucks

Advanced Clean Fleets Regulation

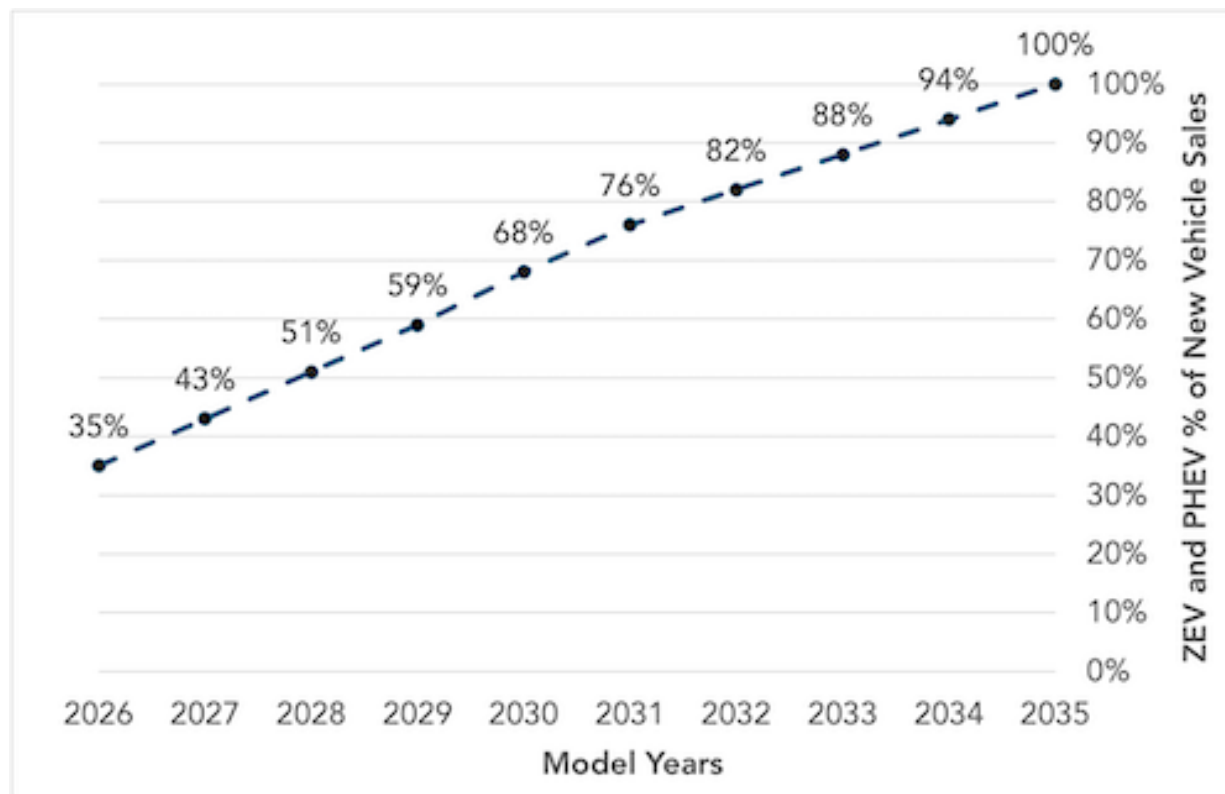
ZEV Milestone Schedule by Group	Percentage of Vehicles in Fleets that must be Zero-emissions				
Group	10%	25%	50%	75%	100%
Group 1: Box trucks, vans, buses with yard tractors, light-duty package delivery vehicles	2025	2028	2031	2033	2035
Group 2: Work trucks, day cab tractors, buses with three axles	2027	2030	2033	2036	2039
Group 3: Sleeper cab tractors and specialty vehicles	2030	2033	2036	2039	2042

Advanced Clean Cars II

- EO N-79-20: By 2035, all new passenger cars, trucks and SUVs sold in CA will be ZEV or PHEVs
- Two-pronged regulations
 - Zero-emission Vehicle Regulations
 - Require increasing % of vehicles sold in CA to be ZEVs
 - Low-emission Vehicle regulations
 - Require increasingly stringent emission standards to reduce smog-forming emissions

Advanced Clean Cars II

- Currently, 16% of new vehicles sold in CA are ZEV or PHEV



The Off-Road Diesel Regulation

- Requires off-road fleets to reduce emissions by retiring older vehicles, repowering older engines, or installing diesel emission controls

Phase-Out Schedule – Engines Prohibited from Operation in California by Compliance Date and Fleet size

Year	Large Fleets	Medium Fleets	Small Fleets
2024	Tier 0		
2026	Tier 1	Tier 0	
2028	Tier 2	Tier 1	Tier 0
2030		Tier 2	Tier 1
2032			Tier 2

The Off-Road Diesel Regulation 2024 Requirements

- Adding vehicle restrictions
 - Only Tier 4 Final or cleaner engines may be added to large and medium fleets starting January 1, 2024
 - Only Tier 4i or cleaner engines may be added to small fleets starting January 1st, 2024
- Renewable Diesel Requirements
 - Beginning January 1, 2024, all CA fleets are required to procure and only use R99 or R100 renewable diesel fuel in off-road vehicles
 - R99 or R100: diesel fuel substitute produced from non-petroleum renewable sources
 - Exemptions
 - Captive attainment areas
 - Tier 4 Final Fleets
 - Cold weather

CA Environmental Justice Initiatives

- Tools to assess environmental burdens and disproportionately impacted communities:
 - CalEnviroScreen Version 4.0
 - CalEEMod Version 2022
- AB 617 - Community Air Protection Program (CAPP)

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 (con't)



Statewide Emission Reduction Measures

- Advanced Clean Trucks Regulation – adopted June 2020
- Cargo Handling Equipment – consideration anticipated in 2028
- Chrome Plating Control Measure – adopted May 2023
- Heavy-Duty Engine and Vehicle Omnibus Regulation – adopted in September 2021
- Zero-emission forklift regulation – consideration anticipated May 2024

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



CTR Phase-In 2024 and Onward

Core Facilities

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).

Additional Applicability Facilities

CEQA Air Quality and GHG Review Update

- Status of CEQA State and Local Guidelines
 - BAAQMD CEQA Guidelines (April 2023)
 - South Coast AQMD Cumulative Health Risk Impacts
- Berkeley Natural Gas Ordinance Status
- Recent Project Case - East Oakland Stadium Alliance v. City of Oakland (89 Cal. App. 5th 1226)

Air Quality & GHG Analysis

Update on Technical Tools

- CalEEMod web v2022.1.1.21 emissions model
- CARB Mobile Source Emissions Inventory (MSEI) Modeling Tools
 - EMFAC 2021 (EPA approved); workshop on EMFAC202Y 1/17/24
 - OFFROAD2021 Database
- AERMOD dispersion model v23132
 - Bug fixes in buoyant-line, area circle, RLINE source types
 - Updates to the RLINE model and *Beta* GRSM Tier 3 NOx screening option
 - *Alpha* options for high buoyant plumes, plume meander for area sources, plume rise from aircraft
 - AERMOD Implementation Guide (October 2023) – epa.gov/SCRAM
 - Proposed rule to revise the *Guideline on Air Quality Models* (10/23/23)
- Air Toxics Health Risk Assessment (HRA)
 - CARB Consolidated list HRA health values 10/6/23
ww2.arb.ca.gov/sites/default/files/classic/toxics/healthval/contable10062023.pdf
 - HARP2 dated 4/28/22; latest health database 10/6/23

Air District Regulatory Update

South Coast AQMD – 2024 Update¹

- Rules Adopted in 2023:

Rule #	Description	Adoption Date
1180 & 1180.1	Fenceline and Community Air Monitoring	1/5/24
1405	Control of Ethylene Oxide Emissions from Sterilization and Related Operations	12/1/2023
1110.2	Emissions from Gaseous- and Liquid-Fueled Engines	11/3/2023
1110.3 (new)	Emissions from Linear Generators	11/3/2023
1111	Reduction of Emissions from Natural Gas-Fired, Fan-Type Central Furnaces	9/1/2023
1153.1	Emissions of Oxides from Commercial Food Ovens	8/4/2023
463 & 1178	Organic Liquid Storage / Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities	5/5/2023
219 & 222	Equipment Not Requiring a Permit / Filing Requirement for Specific Emission Sources nor Requiring a Permit	4/7/2023
1401.1	Requirements for New and Relocated Facilities Near Schools	3/3/2023
1148.2	Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers	2/3/2023
1107	Coating of Metal Part and Products	1/6/2023

- WAIRE Rule > Phase 1 and 2 facilities submit annual reports by 1/31/24³
- What is happening with RECLAIM program?

¹www.aqmd.gov/home/rules-compliance/rules/recent-actions

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

South Coast AQMD – 2024 Update (con't)

- Proposed New and Amended Rules:¹

Rule No.	Description	Status
PR 317.1 (New)	Clean Air Act Nonattainment Fees for the 8-hour Ozone Standards	11/7/23 - Working Group #4
PAR 461.1	Gasoline Transfer and Dispensing for Mobile Fueling Operations	2/2/24 – Public Hearing
PAR 463	Organic Liquid Storage	1/3/24 - Working Group #1
PR 1110.4 (New)	Emissions from Emergency Generators	TBD
PAR 1111 & 1121	Reduction of NOx Emissions from Natural Gas-Fired, Fan-Type Central Furnaces / Control of NOx from Residential Type, Natural Gas-Fired Water Heaters	1/31/24 - Working Group #3
PAR 1118	Control of Emissions from Refinery Flares	2/8/24 – Public Workshop
PAR 1146.2	Control of NOx from Large Water Heaters, Small Boilers and Process Heaters	2/7/24 - Public Workshop
PAR 1148.1	Oil and Gas Production Wells	2/1/24 - Public Workshop
PAR 1151	Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations	11/7/23 - Working Group #1
PAR 1401.1	Control of Emissions from Incinerators	11/16/23 - Working Group #1
PAR 1171	Solvent Cleaning Operations	1/16/24 - Working Group #1
PAR 1401	New Source Review of Toxic Air Contaminants	12/19/23 - Working Group #1
PR 1435 (New)	Control of Toxic Air Contaminants from Metal Heating Operations	11/16/23 - Working Group #4
PR 1445 (New)	Control of Toxic Air Contaminants from Laser and Plasma Arc Cutting	11/11/23 - Working Group #3
PR 1455 (New)	Control of Toxic Air Contaminants from Torch Cutting and Welding	TBD

- 2024 Rule & Control Measure Forecast: 1/5/24 Governing Board
- BACT Guidelines Public Hearing – Feb 2nd 2024

¹www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules



San Joaquin Valley APCD

- **Attainment Planning**
 - 2022 Ozone Plan for the 2015 8-hr standard – Adopted 12/22
 - 2023 Plan for the 2012 Annual PM2.5 Standard (10/19/23 Hearing)
- **Rules Adopted in 2023:**
 - Crude Oil Production Sumps - Rules 4401 and 3200 Adopted (12/21/23)
 - Open Areas – Rule 8051 (Amended 9/21/23)
 - Transfer of Organic Liquid, Storage of Organic Liquids, Components et. al. - Rule 4624, 4623, 4455, 4409 (Amended 6/15/23)
 - Rule 4901 – Wood Burning Fireplaces and Heaters (5/18/23)
 - New and Modified Stationary Source Rule – Rule 2201 (Amended 4/20/23)
- **Rules in Development 2024:**
 - Federally Mandated Operating Permits – Rule 2520
 - Conservation Management Practices – Rule 4550
 - Commercial Charbroiling – Rule 4692
- **Guidance Documents**
 - Best Available Control Technology (BACT) - 6/1/23
- **Governing Board Meeting 2/15/24**

Bay Area and San Diego County

- Bay Area AQMD
 - Amendments to Reg 8, Rule 8 – Wastewater Collection and Separation (adopted 12/20/23)
 - Proposed Reg 11, Rule 18 Amendments – Air Toxic Emissions at Existing Facilities – Public Workshop 2/15/24
 - Proposed Reg 8, Rule 18 Amendments – Equipment Leaks (draft 11/20/23)
- San Diego County APCD
 - New Governing Board via AB 423
 - 2022 Regional Air Quality Strategy (RAQS - adopted 3/9/23)
 - Severe Nonattainment for Ozone – Title V Rule 1410 Eff. 2/27/24
 - Rule 19.2 – Continuous Emissions Monitoring (10/23)
 - Best Available Control Technology Guidance – Revised Nov 2023

2024 Air Quality in California - Summary

- Biden and EPA going deep on Clean Energy, Climate Change and Clean Air
- SCOTUS having a greater impact in 2024
- Clean Air Implementation Progress in California
- Environmental Justice and Community Involvement picking up
- CTR Emission Inventory Phase-in Continues
- New Climate Corporate Data Accountability Act
- All watching the 2024 Election!
- Call us with questions on developing air quality regulations!

CONTACT / QUESTIONS



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