

# Air Quality Update

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## February 28, 2025 – SCAQMD

### CALIFORNIA VEHICLE ELECTRIFICATION

*Updated Notice: On February 18<sup>th</sup>, the Office of Administrative Law (OAL) disapproved the amendments to the California Air Resources Board (CARB) Low Carbon Fuel Standard (LCFS) Regulation. On February 26<sup>th</sup>, CARB provided guidance that they will address the issues raised by OAL and resubmit the amended regulation within 120 days. The summary of the revisions below will likely remain in the amended regulation but will not go into effect until approved by OAL.*

In 2006, the California Legislature passed the California Global Warming Solutions Act, Assembly Bill (AB) 32, creating a multi-year roadmap to greenhouse gas (GHG) emissions reduction in California. The first regulation passed under AB 32 to address transportation fuel emissions was the LCFS Program. The LCFS Program is designed to decrease the carbon intensity (CI) of transportation fuel in California. Annual CI benchmarks are lowered each year to encourage providers of transportation fuels to supply a lower-carbon mix. Use of lower CI fuels generates credits that can be sold on the open market. The LCFS Regulation was amended in November 2024 with the following changes:

- Increased the 2030 CI targets from 20% to 30%, with an immediate 5% cut in 2025;
- Extended the program to achieve 90% reduction target by 2045;
- Phased in some limits to bio-methane crediting;
- Reduced credits from electric forklifts;

- Required direct metering for electric forklift credits;
- Required third-party verification to electricity, hydrogen, and other fuels; and
- Expanded zero-emission vehicle (ZEV) infrastructure crediting opportunities.

The full proposed LCFS Regulation language is available at:

<https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-regulation>

Several additional CARB rules have been enacted to reduce fossil fuel use, including the following:

- Advanced Clean Trucks (ACT): This rule is in effect and places ZEV sales requirements on manufacturers of heavy-duty trucks.
- Advanced Clean Cars II (ACC II): This legislation is in effect and requires all new passenger cars, pickup trucks, and sport utility vehicles (SUVs) sold in California to be ZEVs by 2035.
- Zero-Emission Forklift Regulation: Forklifts using large spark-ignition (LSI) engines are subject to phaseout for zero-emission versions (battery-electric and fuel-cell) starting in 2026.
- Advanced Clean Fleets (ACF): **CARB withdrew their request for a U.S. Environmental Protection Agency (U.S. EPA) waiver for ACF for High-Priority or Drayage fleets.** So, CARB is not enforcing the High-Priority and Drayage ACF rules. The ACF State and Local Government Agency (SLGA) rule is in effect and requires medium- and heavy-duty vehicles to start transitioning to zero-emission or near zero-emission technologies.

### Air Quality Tip

*South Coast Air Quality Management District (SCAQMD) invoices can be viewed and paid online via their Online Payment portal. Check for outstanding invoices periodically, as Permits to Operate may be revoked/expired by the District for nonpayment of fees. Permits may only be reinstated if the request for reinstatement and the outstanding invoice payment is made within 1 year from permit expiration.*

#### Upcoming Online EH&S Training Offered by Yorke Engineering (3-Hour Sessions)

- Southern California Air Quality Regulations, Permitting, and Compliance Seminar: May 6, 8, 13, 14, and 15, 2025  
Class Info at: <http://yorkeengr.com/classes>

#### Upcoming Due Dates for 2025\*

- Title V – 500-SAM ..... 2/28
- RECLAIM APEP (Cycle 1) ..... 3/1
- Title V – 500-ACC ..... 3/1  
(Except RECLAIM Cycle 2 ..... 8/29)
- CARB Off-Road DOORS Reporting for All Fleets ..... 3/1
- CARB PERP Reporting: Equip. Units and Low-Use Engines ..... 3/1
- CARB Refrigerant Reporting for Medium/Large Systems (≥ 200 lbs) ..... 3/1
- CARB GHG Semiconductor Report ..... 3/1
- U.S. EPA GHG Report ..... 3/31
- CARB LCFS Q4 Fuel Report ..... 3/31
- CARB ACF Report for SLGA Fleets ..... 4/1
- CARB GHG > 25K Metric Tons ..... 4/10
- SCAQMD Rule 1110.2 Quarterly ..... 4/15
- RECLAIM Quarterly (Cycles 1 & 2) ..... 4/30
- CARB LCFS Annual Fuel Report ..... 4/30
- SCAQMD AER ..... 5/1
- CARB GHG 10-25K Metric Tons and All Electric Retailers ..... 6/1
- CARB Gas-Insulated Equipment GHG Report ..... 6/1
- CARB LSI DOORS Reporting for Medium and Large Fleets ..... 6/30
- CARB LCFS Q1 Fuel Report ..... 6/30
- Title V – Application for Permit Renewal – Due 180 Days Prior to Permit Expiration

*\*Due dates listed are statutory dates; sometimes dates are extended when on a weekend/holiday.*

## SCAQMD AMENDED RULE 1146.2 – CONTROL OF OXIDES OF NITROGEN (NO<sub>x</sub>) FROM LARGE WATER HEATERS, SMALL BOILERS, AND PROCESS HEATERS

The SCAQMD amended Rule 1146.2 to regulate emissions of oxides of nitrogen (NO<sub>x</sub>) from water heaters, small boilers, and process heaters with a capacity of up to 2 million British thermal units per hour (Btu/hr). Adopted June 7, 2024, the amended rule sets phased emission limits and compliance dates for existing equipment, aiming for a zero-emission standard starting in 2026.

### Emission Limits and Compliance Dates

Rule 1146.2 categorizes large water heaters, small boilers, and process heaters into Type 1 and Type 2 units based on their heat input capacity, with Type 1 units having a capacity of up to 400,000 Btu/hr and Type 2 units ranging from 400,000 to 2,000,000 Btu/hr. Compliance will be phased in based on equipment type, age, and rating. Older units must meet stricter emission standards as they age, with a final “end-of-life” age set to January 1, 2025, if the unit’s age cannot be verified through documentation like purchase invoices or nameplates. The amended limits for both unit types are listed in Table 1 below.

**Table 1: Amended Emission Limits<sup>1</sup>**

Equipment Category	NO <sub>x</sub> Emission Limit	CO Emission Limit
Type 1, Excluding Pool Heaters	20 ppm @ 3% O <sub>2</sub>	N/A
Type 1 Pool Heaters	55 ppm @ 3% O <sub>2</sub>	N/A
Type 2 Units	20 ppm @ 3% O <sub>2</sub>	400 ppm @ 3% O <sub>2</sub>

1. Per Table 1 of Amended Rule 1146.2 posted June 7, 2024.

The Table 1 emission limits apply to new units until the applicable compliance date as shown in Table 2.

**Table 2: Future Compliance Schedule<sup>1</sup>**

Equipment Category	Compliance Schedule	Compliance Date	Unit Age
Type 1 Unit <sup>2</sup>	Phase I	New Buildings: Jan. 1, 2026 Existing Buildings: Jan. 1, 2029	15
Instantaneous Water Heater ≤ 200,000 Btu/hr <sup>3</sup>			25
Instantaneous Water Heater > 200,000 Btu/hr <sup>3</sup>	Phase II	New Buildings: Jan. 1, 2028 Existing Buildings: Jan. 1, 2031	25
Type 1 Pool Heater			15
Type 2 Unit <sup>4</sup>			25
Type 1 High-Temperature Unit <sup>5</sup>	Phase III	New Buildings: Jan. 1, 2029 Existing Buildings: Jan. 1, 2033	25
Type 2 High-Temperature Unit <sup>5</sup>			25

1. Per Tables 2 and 3 of Amended Rule 1146.2 posted June 7, 2024.

- Referring to a Type 1 or 2 unit that is not a Pool Heater, High-Temperature Unit, or Instantaneous Water Heater.
- Instantaneous Water Heater refers to a tankless water heater with a rated heat capacity of < 2,000,000 Btu/hr that heats water only on demand.
- Referring to a Type 2 Unit that is not a High-Temperature Unit or Instantaneous Water Heater.
- High-Temperature Units are defined as units designed to produce steam or water above 180 degrees Fahrenheit.

After the applicable compliance date, all new units must adhere to zero-emission standards, while existing units may be maintained in-use until the unit age limits are exceeded.

### Retrofit and Burner Replacement

Operators can retrofit units with certified kits and demonstrate compliance via independent tests. If a unit’s burner is replaced before the compliance deadline, it must meet NO<sub>x</sub> and carbon monoxide (CO) limits, but will not be considered a new unit under the amendment.

### Recordkeeping

Equipment owners must keep records for at least 3 years, including:

- Manufacturer instructions, maintenance logs, and fuel usage;
- A government-issued permit for construction projects;
- Manufacturer manual or invoice;
- Documentation of the unit’s rated heat capacity; and
- If modified, documentation of the

new capacity, signed by a licensed professional, with details of the changes and modification dates.

### Exemptions

Exemptions apply for low-use units installed before the rule adoption, such as:

- Units using less than 3,000 therms/year (1,000,000-2,000,000 Btu/hr);
- Units using less than 2,000 therms/year (400,000-1,000,000 Btu/hr); and
- Certain pre-2000 Type 2 units using under 9,000 therms/year.

Residential and small business units may also qualify for exemptions if they meet recordkeeping requirements.

### Alternative Compliance

The amended rule also includes a few specific alternative compliance options for unique situations, such as multiple units, utility delays, instantaneous water heaters, leased property extensions, and construction delay.

*Yorke Engineering, LLC specializes in air quality and environmental consulting for stationary and mobile sources, including dispersion modeling, health risk assessments, permitting, emission inventories, air quality compliance systems, etc. Yorke Engineering has assisted over 2,050 customers, including a wide variety of industrial facilities and government organizations throughout California.*