

# Air Quality Update

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## September 15, 2022 – SCAQMD CTR REGULATION UPDATE

On January 1, 2022, recent changes to the California Air Resources Board (CARB) “Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants” (“CTR” Regulation) went into effect, requiring some facilities to begin reporting as early as 2023 for 2022 emissions. Applicability of the rule will phase in over three different sector classifications and two air district classifications. Permitted facilities meeting the following criteria are subject to reporting:

- Emit 4 tons per year (tpy) of any criteria pollutant [100 tpy of carbon monoxide (CO)] in a Group A air district (see list below);

<b>District Group A:</b>	➤ SMAQMD	
➤ SCAQMD	➤ SDAPCD	
➤ SJVAPCD		<b>District Group B:</b>
➤ BAAQMD	➤ All Other Air	
➤ ICAPCD	Districts	

- Emit 10 tpy of any criteria pollutant (100 tpy of CO) in a Group B air district (all other smaller districts);
- Exceed the activity level threshold for a specific permitted process (for example, combustion of diesel oil in Tier 0-3 engines, exceeding 30 gallons or 5 hours per year of non-emergency use, except for agricultural and medical industry sectors);
- Report greenhouse gases (GHGs) under the Mandatory Reporting Rule (MRR);
- Hold permit(s) to emit 250 tpy or more of any nonattainment criteria pollutant (“Criteria Facility”); or
- Are classified as “high priority” under Assembly Bill (AB) 2588 (Air Toxics “Hot Spots” Act).

Facilities in the six Group A air districts that are already required to report GHG emissions (MRR), criteria pollutants, or air toxics under AB 2588 have begun reporting. Full reporting of stack data will be due in 2023 for 2022 emissions data to the air district in which they reside. Group B districts will begin reporting in 2024.

Required data for reporting under CTR includes:

- Device information;
- Process descriptions and annual activity levels;
- Actual emissions for each pollutant;
- Methodology for calculating emissions; and
- Stack/emissions release location information (e.g., location, temperature, velocity, etc.).

Facilities currently reporting through the MRR or Criteria Facilities will also need to report their portable diesel engine usage for any units greater than 50 brake horsepower (bhp) starting in 2023 for 2022 data.

Abbreviated reporting of throughput data and facility information will be allowed for certain sectors, including:

- Agricultural facilities;
- Facilities only operating natural gas-fired boilers/heaters;
- Facilities only operating diesel emergency generators or fire pumps; and
- Gasoline dispensers.

CARB has released guidance documents to assist facilities with determining the applicability of the regulation, as well as what data is required. Additional information is available on the CARB website at:

<https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting/guidance-documents-ctr>

## Air Quality Tip

*Unless otherwise subject to CTR reporting, consider staying below the Reporting Thresholds for Permitted Processes to remain out of reporting, if possible. For example, keep non-emergency use of Tier 0-3 diesel engines below 5 hours. For more information, see Tables A-1 to A-3, starting on page 35 of the currently available regulation text: [CTR Unofficial Regulation Text \(ww2.arb.ca.gov\)](http://ww2.arb.ca.gov).*

## Upcoming Online EH&S Training Offered by Yorke Engineering

- Southern California Air Quality Regulations, Permitting, and Compliance Seminar:  
Nov. 1, 3, 8, 9, 10, 2022 (3-Hour Sessions)  
Class Info at: <http://yorkeengr.com/classes>

## Upcoming Due Dates for 2022/2023\*

- CARB LCFS Q2 Fuel Report ..... 9/30/22
- SCAQMD 1110.2 Quarterly ..... 10/15/22
- RECLAIM Quarterly (Cyc. 1 & 2)...10/30/22
- CARB GHG Cap-and-Trade Annual Compliance Surrender..... 11/1/22
- CARB LCFS Q3 Fuel Report ..... 12/31/22
- CARB On-Road HDDVs Must Be 2010 Engine or Newer..... 1/1/23
- CARB Off-Road Diesel Compliance by Fleet Average or BACT (All Fleets).. 1/1/23
- SCAQMD 1110.2 Quarterly ..... 1/15/23
- RECLAIM Quarterly (Cycle 2) ..... 1/30/23
- CARB On-Road TRUCRS Reporting for Flexibility Options... 1/31/23
- Title V – 500-SAM..... 2/28/23
- RECLAIM APEP (Cycle 1)..... 3/1/23
- Title V – 500-ACC ..... 3/1/23 (Except RECLAIM Cycle 2.....8/29/22)
- CARB Off-Road DOORS Reporting for All Fleets ..... 3/1/23
- CARB PERP Reporting: Equip. Units, Low-Use, Large Fleet Avg. .... 3/1/23
- CARB Refrigerant Reporting for Medium/Large Systems (≥ 200 lbs). 3/1/23
- CARB GHG Semiconductor Report . 3/1/23
- 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 ADOPTED RULE CHANGES

For full details on changes below, go to: <http://www.aqmd.gov/home/regulations/rules/recent-actions>

### ■ Rule 1147: NO<sub>x</sub> Reductions from Miscellaneous Sources

Rule 1147 was amended by the South Coast Air Quality Management District (SCAQMD) on May 6, 2022. This rule applies to all permitted miscellaneous combustion equipment, such as afterburners, oxidizers, incinerators, crematories, fryers, roasters, heated process tanks, ovens, dryers, kilns, make-up air heaters, fabric/carpet dryers, and any other equipment that is not subject to another SCAQMD Regulation XI rule. The amended rule updates nitrogen oxides (NO<sub>x</sub>) emission limits and adds CO emission limits for Regional Clean Air Incentives Market (RECLAIM) and non-RECLAIM facilities.

As facilities transition from RECLAIM into Rule 1147, interim limits apply to existing RECLAIM equipment until required to meet the new Rule 1147 NO<sub>x</sub> and CO emission limits. RECLAIM equipment without existing permit limits on NO<sub>x</sub> will be subject to a transitional limit of 102 parts per million by volume (ppmv) NO<sub>x</sub> based on the existing RECLAIM default emission factor of 130 pounds NO<sub>x</sub> per million standard cubic feet (lbs/MMSCF) of natural gas.

Existing equipment at non-RECLAIM facilities meeting the previous rule limits of Rule 1147 (amended July 7, 2017) are required to submit permit applications to meet the new emission limits of Rule 1147 (amended May 6, 2022) by July 1<sup>st</sup> of the year after the unit burner becomes 32 years old. For example, an afterburner at a non-RECLAIM facility meeting the existing limit of 60 ppmv must submit an application to meet the new limit of 20 ppmv by the time the unit becomes 32 years old.

Units not in compliance with the previous Rule 1147 NO<sub>x</sub> limits must submit applications to meet the new emission limits by July 1, 2023, or July 1<sup>st</sup> of the year after the unit burner becomes 12 years old, whichever is later. For example, an afterburner at a non-RECLAIM facility without a 60 ppmv permit limit that does not meet the existing limit of 60 ppmv, as demonstrated by source testing, must submit an application to meet the new limit of 20 ppmv by July 1, 2023, or July 1<sup>st</sup> of the year after the unit burner becomes 12 years old.

Table 1 below summarizes the emission limits for in-use units and new units. Any device must meet the new limits upon burner replacement. A CO concentration limit of 1,000 ppmv

applies for all equipment categories.

Units subject to Rule 1147 may be decommissioned instead of complying with applicable new emission limits within 30 months after the applicable application submittal deadline by having the SCAQMD permit inactivated. Facilities that have more than five devices subject to the same Rule 1147 compliance deadline may submit a permit application to comply with a multiple-unit implementation schedule based on minimum percentages of total heat input. Lastly, periodic source tests are now also required. Units <10 million British thermal units per hour (MMBtu/hr) are required to be tested every 5 calendar years, units 10-40 MMBtu/hr every 3 calendar years, and units >40 MMBtu/hr every calendar year.

**Table 1: Amended Rule 1147 NO<sub>x</sub> Limits**

Equipment Categories	Process Temp.	In-Use Units NO <sub>x</sub> Limits	New Units NO <sub>x</sub> Limits
<b>Gaseous Fuel-Fired Equipment</b>			
Afterburner, Degassing Unit, Thermal Oxidizer, Catalytic Oxidizer, or Vapor Incinerator	All	60 ppmv @ 3% O <sub>2</sub>	20 ppmv @ 3% O <sub>2</sub>
Remediation Unit	All	60 ppmv @ 3% O <sub>2</sub>	60 ppmv @ 3% O <sub>2</sub>
Burn-Off Furnace, Burnout Oven, Incinerator, or Crematory with or Without Integrated Afterburner	All	60 ppmv @ 3% O <sub>2</sub>	30 ppmv @ 3% O <sub>2</sub>
Evaporator, Fryer, Heated Process Tank, or Parts Washer	All	60 ppmv @ 3% O <sub>2</sub>	60 ppmv @ 3% O <sub>2</sub>
Oven, Dehydrator, Dryer, Heater, Kiln, Calciner, Cooker, Roaster, Furnace, or Heated Storage Tank	<1,200°F	30 ppmv @ 3% O <sub>2</sub>	20 ppmv @ 3% O <sub>2</sub>
	≥1,200°F	60 ppmv @ 3% O <sub>2</sub>	30 ppmv @ 3% O <sub>2</sub>
Make-Up Air Heater or Other Air Heater Located Outside of Building with Temperature-Controlled Zone Inside Building	All	30 ppmv @ 3% O <sub>2</sub>	30 ppmv @ 3% O <sub>2</sub>
Tenter Frame or Fabric or Carpet Dryer	All	30 ppmv @ 3% O <sub>2</sub>	20 ppmv @ 3% O <sub>2</sub>
Autoclave	All	N/A	30 ppmv @ 3% O <sub>2</sub>
Tunnel Kiln or Beehive Kiln	<1,200°F	N/A	30 ppmv @ 3% O <sub>2</sub>
	≥1,200°F	N/A	60 ppmv @ 3% O <sub>2</sub>
Chiller (Absorption or Adsorption)	All	N/A	20 ppmv @ 3% O <sub>2</sub>
Turbine <0.3 MW (All Other)	All	N/A	9 ppmv @ 15% O <sub>2</sub>
Rotary Dryer	All	N/A	30 ppmv @ 3% O <sub>2</sub>
Other Unit or Process Temperature	<1,200°F	30 ppmv @ 3% O <sub>2</sub>	30 ppmv @ 3% O <sub>2</sub>
	≥1,200°F	60 ppmv @ 3% O <sub>2</sub>	60 ppmv @ 3% O <sub>2</sub>
<b>Liquid Fuel-Fired Equipment</b>			
Turbine <0.3 MW (In-Use Distillate Fuel)	All	77 ppmv @ 15% O <sub>2</sub>	N/A
All Liquid Fuel-Fired Units	<1,200°F	40 ppmv @ 3% O <sub>2</sub>	40 ppmv @ 3% O <sub>2</sub>
	≥1,200°F	60 ppmv @ 3% O <sub>2</sub>	60 ppmv @ 3% O <sub>2</sub>

*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 1,500 customers, including a wide variety of industrial facilities and government organizations throughout California.*