

Air Quality Update

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AB 617 IMPLEMENTATION

The “Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants,” or CTR Regulation, was adopted by the California Air Resources Board (CARB) on December 14, 2018. The CARB staff is expected to continue to modify elements of the regulation before it becomes finalized and effective. There are four facility categories that trigger applicability to report criteria air pollutants and toxic air contaminants to local air districts and CARB, which include:

- 1) Facilities subject to the CARB greenhouse gas (GHG) Mandatory Reporting Regulation (MRR);
- 2) Facilities permitted to emit 250 tons per year or more of non-attainment criteria pollutants or their precursors;
- 3) Facilities that received an elevated Air Toxic Hot Spot prioritization score from their local air district; and
- 4) All facilities with one or more permitted sources that are within a selected community.

CARB has released an initial list of facilities potentially subject to the emissions reporting requirements of the regulation, available for download here:

<https://ww2.arb.ca.gov/our-work/programs/criteria-pollutant-and-toxics-emissions-reporting/potential-facilities-subject>

Most facilities that fall under Categories 1-3 will start reporting emissions annually, beginning with reporting 2018 emissions in 2019. Facilities that fall under Category 4 will start reporting 2019 emissions in 2020. Emissions reporting data will be due to the local air district prior to May 1st of each year.

Emissions reports will be submitted by the air districts to CARB by August 1st of each year. For more information, see:

<https://ww2.arb.ca.gov/our-work/programs/criteria-pollutant-and-toxics-emissions-reporting/criteria-pollutant-and-toxics>

CARB has also posted the list of the first round of selected communities. South Coast communities include Wilmington, West Long Beach, Carson, San Bernardino, Muscoy, Boyle Heights, East Los Angeles, and West Commerce. Steering Committee meetings have begun; for more information, visit:

<http://www.aqmd.gov/nav/about/initiatives/environmental-justice/ab617-134>

PERP AND ATCM RULE AMENDMENTS FOR PORTABLE EQUIPMENT

On November 30, 2018, the recent rule amendments to the CARB Portable Equipment Registration Program (PERP) and Portable Airborne Toxic Control Measure (ATCM) took effect. This ATCM implements a new Tier phase-out schedule and makes the 2013, 2017, and 2020 fleet average standards obsolete. Large fleets with more than 750 horsepower (hp) under common ownership may instead opt-in to a new weighted fleet average compliance path for January 1st of 2020, 2023, and 2027, as long as all engines, including Emergency and Low-Use, are registered under PERP.

Credits are available for small and large fleets that have early Tier 1 or 2 retirements and/or meet specific fleet average standards laid out in the ATCM. Credits can extend compliance requirements.

Low-Use (increased to 200 hours/year) and Emergency-Use engines are exempt from the Tier phase-out or fleet average calculations and require proper recordkeeping and reporting. Applying

for Low-Use or Change of Ownership is required at least 6 months prior to the phase-out deadline.

Air Quality Tip

With the focus now on sources of air toxic emissions throughout California, it is important for every facility to know what their sources of toxic emissions are and how their emissions are calculated. Accuracy matters!

Upcoming Training Offered by Yorke Engineering

- South Coast Air Quality Regulations, Permitting, and Compliance Seminar: April 16 – April 17, 2019
<http://www.yorkeengr.com/AirQualityClasses.htm>
- UCI Extension Air Quality Permitting and Compliance – Spring Quarter:
<http://unex.uci.edu/courses>
(see Environmental Management)

Upcoming Due Dates for 2019*

- RECLAIM Quarterly (Cycle 2)..... 1/30
- CARB On-Road TRUCRS Reporting for Flexibility Options..... 1/31
- Title V – 500-SAM 2/28
- Title V – 500-ACC..... 3/1 (Except RECLAIM Cycle 2 8/29)
- RECLAIM APEP (Cycle 1)..... 3/1
- CARB Off-Road DOORS Reporting for All Fleet Sizes 3/1
- CARB PERP Annual Reports for Equipment Units and Engine Low-Use 3/1
- CARB Refrigerant Reporting for Medium/Large Systems (≥ 200 lbs.)..... 3/1
- CARB GHG Semiconductor Reporting .3/1
- SCAQMD AER 3/19
- USEPA GHG Report 3/31
- CARB GHG > 25K Metric Tons 4/10
- SCAQMD 1110.2 Quarterly 4/15
- CARB GHG 10-25K Metric Tons and All Electric Retailers 6/1
- CARB GHG SF₆ Switchgear 6/1
- CARB LSI DOORS Reporting for Medium and Large Fleets..... 6/30
- Title V – Application for Permit Renewal – Due 180 Days Prior to Permit Expiration

**All due dates listed are the statutory dates; sometimes dates are extended when they fall on a weekend/holiday.*

SCAQMD NSR BACT UPDATE

In addition to the reporting and other emission reduction requirements of Assembly Bill (AB) 617, the legislation also requires CARB to establish and maintain a statewide clearinghouse for Best Available Control Technology (BACT) and Best Available Retrofit Control Technology (BARCT). Although CARB has had a BACT Clearinghouse, it has not been maintained.

To begin the process of updating their BACT Clearinghouse, several CARB staff members have joined the South Coast Air Quality Management District's (SCAQMD's) BACT Scientific Review Committee (SRC). The SRC reviews and comments on proposed BACT updates prior to adoption by the Governing Board each year. The 2018 revisions to BACT determinations and guidelines are expected to go to the Governing Board in the first quarter of 2019.

Among the changes proposed, a paragraph in the BACT guidelines has been drafted to prevent circumvention of the BACT requirement for emission increases ≥ 1 pound (lb) per day. Under this provision, cumulative emission increases that equal or exceed 1 lb/day for any non-attainment air pollutant, ozone-depleting compound, or ammonia within a 5-year period will be subject to BACT. In addition, the Energy Policy is proposed to require that new or repowered in-basin fossil-fueled power plants incorporate Lowest Achievable Emission Rate (LAER)/BACT with consideration of energy efficiency.

The SCAQMD is proposing LAER/BACT updates for external floating roof storage tanks, soil vapor extraction, gas turbines, and internal combustion (IC) engines. In addition, they are proposing updates to Minor Source BACT determinations, including thermal oxidizers, deep fat fryers, composting, boilers, non-refinery process

heaters, graphic arts printing, automotive spray booths, IC engines, and Rule 1147 nitrogen oxide (NO_x) sources.

The SCAQMD has also proposed the deletion of outdated LAER determinations currently listed on their website, as well as the creation of a search engine by date or equipment category. For more information, go to:

<http://www.aqmd.gov/home/permits/bact>

ADOPTED AMENDMENTS TO RULES 1146, 1146.1, 1146.2, AND 1100

On December 13, 2018, the SCAQMD Governing Board passed amendments to the series of rules that apply to boilers, steam generators, and process heaters. The Rule 1146 series changes enact new BARCT limits that impact both Regional Clean Air Incentives Market (RECLAIM) and non-RECLAIM facilities.

The new limits are shown in Table 1. For units permitted near, yet above, the new BARCT levels, additional time is allowed to meet the new requirements: either at the time of $\geq 50\%$ burner replacement or by December 2033.

Table 1: New BARCT Limits

Equipment Type	New BARCT Limit	Near BARCT Limit
Rule 1146 Group I ≥ 75 MMBtu/hr	Units > 5 ppm: 5 ppm	Units ≤ 5 ppm: In Compliance
Rule 1146 Group II ≥ 20 to < 75 MMBtu/hr	For Units > 12 ppm: 5 ppm	Units ≤ 12 ppm: Fire-Tube Boilers: 7 ppm Other Boilers: 9 ppm
Rule 1146 Group III ≥ 5 to < 20 MMBtu/hr	For Units > 12 ppm: Fire-Tube Boilers: 7 ppm Other Boilers: 9 ppm	For Units ≤ 12 ppm: Fire-Tube Boilers: 7 ppm Other Boilers: 9 ppm
Rule 1146.1 > 2 to < 5 MMBtu/hr		
Atmospheric Units ≤ 10 MMBtu/hr	For Units > 12 ppm: 12 ppm	For Units ≤ 12 ppm: In Compliance
Thermal Fluid Heaters	Units > 20 ppm: 12 ppm	Units ≤ 20 ppm: 12 ppm

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 850 customers, including a wide variety of industrial facilities and government organizations throughout California.

RECLAIM units that are above the new BARCT limits will need to follow the compliance schedule in Rule 1100, which requires 75% of total heat input for all Rule 1146 and Rule 1146.1 units to meet concentration limits by January 1, 2021, and 100% by January 1, 2022.

Non-RECLAIM thermal fluid heaters above 20 parts per million (ppm) will be required to comply by January 1, 2022.

Rule 1146.2 applies to natural gas-fired water heaters, boilers, and process heaters ≤ 2 million British thermal units per hour (MMBtu/hr). No changes were proposed or adopted to the Rule 1146.2 limits. RECLAIM facilities will be required to meet the current limits when units are replaced. The SCAQMD intends to assess potential new BARCT limits by 2022.

For RECLAIM facilities, Rule 222 registrations for 1 to 2 MMBtu/hr units are due immediately upon exiting RECLAIM; thus, registrations should be filed just before exiting.

For more information, go to:

<http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules#1146>