

SCAQMD Rule 1146.2 | EMISSIONS OF OXIDES OF NITROGEN FROM LARGE WATER HEATERS AND SMALL BOILERS AND PROCESS HEATERS

SCAQMD Rule 1146.2, aims to regulate nitrogen oxide (NOx) emissions from large water heaters, small boilers, and process heaters rated less than or equal to 2 million British thermal units (Btu) per hour. As of June 7, 2024, the amended rule establishes emission limits and compliance dates for existing equipment in a phased schedule based on equipment type, with a transition plan towards a zero-emission standard beginning in 2026. **As equipment gets older, it will be expected to operate at zero emissions; once it reaches a certain age limit, based on its category, it will need to be replaced with an electric unit or retrofitted with a certified retrofit kit.**

Who Is Affected by the Rule?

Facilities with Type 1 or Type 2 water heaters, small boilers, and process heaters, including:

- Type 1 units have a capacity of 400,000 Btu/hour or less; and
- Type 2 units range from 400,000 to 2,000,000 Btu/hour.

Current Emission Limits¹

Equipment Category	NOx Emission Limit	CO Emission Limit
Type 1, Excluding Pool Heaters	20 ppm @ 3% O ₂	N/A
Type 1 Pool Heaters	55 ppm @ 3% O ₂	N/A
Type 2 Units	20 ppm @ 3% O ₂	400 ppm @ 3% O ₂

1. Per Table 1 of Rule 1146.2, amended June 7, 2024.

Future Compliance Schedule¹

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

- 1. Per Tables 2 and 3 of Rule 1146.2, amended June 7, 2024. Units should be replaced or retrofitted by the compliance date.*
- 2. Referring to a Type 1 or 2 unit that is not a Pool Heater, High Temperature Unit, or Instantaneous Water Heater.*
- 3. Instantaneous water heater refers to a tankless water heater with rated heat capacity <2,000,000 Btu that heats water only on demand.*
- 4. Referring to a Type 2 Unit that is not a High Temperature Unit or Instantaneous Water Heater.*
- 5. High Temperature Units are defined as units designed to produce steam or water above 180 degrees Fahrenheit.*

What Are the Recordkeeping Requirements?

- Records of the manufacturer's and/or distributor's written instructions, maintenance activity, and fuel usage for a period of no less than 3 years;
- A copy of a government-issued document that grants permission to initiate a construction project;
- A copy of the manufacturer's or distributor's manual or invoice;
- Documentation of the rated heat capacity of the unit; and/or
- If the unit is modified:
 - Documentation of the new heat capacity of the modified unit, signed by the licensed person modifying the unit.
 - Changes that were made, dates of modifications, and a calculation of rated heat input capacity.