



Frequently Asked Questions – Revised (As of 10/28/19) Rule 1111 High Altitude Furnaces – Interim Relief

What is Rule 1111?

Proposed Rule 1111 applies to manufacturers, distributors, sellers, and installers of residential and commercial fan-type central furnaces, requiring either single-phase or three-phase electric supply, used for comfort heating with a rated heat input capacity of less than 175,000 BTU per hour, or, for combination heating and cooling units, a cooling rate of less than 65,000 BTU per hour.

What are Ultra Low-NOx Furnaces?

Ultra low-NOx furnaces are furnaces that have been certified by the South Coast AQMD to meet 14 ng/J.

When were manufacturers required to provide Ultra-Low NOx Furnaces?

Rule 1111 was amended in 2009 to require Ultra-Low NOx Furnaces by 2014. Rule 1111 was subsequently amended to extend the compliance date to October 1, 2019 and to add a mitigation fee to allow additional time for manufacturers to commercialize Ultra-Low NOx Furnaces. Six of the seven manufacturers have certified Ultra-Low NOx Furnaces that are available for sale for elevations below 4,500 feet.

What is the status of Ultra-Low NOx Furnaces for high altitude areas (elevations above 4,500 feet)?

As of October 1, 2019, Carrier has Ultra-Low NOx Furnaces for elevations up to 5,000 feet, but there are no other manufacturers with Ultra-Low NOx Furnaces available for elevations above 4,500 feet. So far, at least three manufacturers are conducting, or planning on conducting, high altitude testing and developing high altitude guidance.

What can you do if you need to install a furnace in a high altitude area?

On and after October 28, 2019, non-compliant furnaces (40 ng/J NOx) manufactured by Carrier, Goodman, or Ingersoll-Rand, and their associated brands, have been granted interim product variances that allows non-compliant furnaces to be sold, distributed, or installed above 4,500 feet (*see caveat below*). Please note that a distributor may request information that is needed to ensure the manufacturer can meet the conditions of their interim product variance.

Caveat for Non-Compliant Furnaces Installed Between 4,500 to 5,000 Feet Above Sea Level?

Installation of non-compliant units between 4,500-5,000 feet is not allowed if there is a comparable (type and size) compliant furnace available for sale. For example if there is a compliant Carrier furnace available for sale, then a comparable non-complaint furnace cannot be installed at elevations between 4,500 and 5,000 feet. Any Carrier, Goodman, or Ingersoll-Rand non-complaint furnace can be distributed, sold, and installed at elevations above 5,000 feet.

When will this interim relief end?

The manufacturers subject to this product variance will return to the Hearing Board in November and December 2019, at which time additional limitations or restrictions may be placed on the variance relief. The product variances will ultimately have a sunset date in early 2020 when manufacturers are anticipated to have Ultra Low-NOx Furnaces available for use in high altitude areas.

What are the requirements for Propane furnaces?

Rule 1111 allows Low-NOx furnaces (40 ng/J) to be installed with a propane conversion kit for propane firing only.

If you have any questions, please call Shawn Wang at (909) 396-3319 or email R1111@aqmd.gov

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