

Daniel Dettmers

Attached is a letter detailing our comments on the addition of a definition for "residential dehumidifier".

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As requested during the HFC Rulemaking, Chapter 173-443, WAC Stakeholder Meeting held on February 3, we are writing to submit an informal comment. The comment comes on behalf of the stand-alone dehumidifier manufacturer [Therma-stor](#) and its brands ([Quest](#), [Phoenix](#) and [Santa Fe](#)) and its parent company, [Madison Industries](#).

We noted that in WAC 173-443-040 (3) Table 3, “residential dehumidifiers” was listed among the equipment having an effective date of January 1, 2024. We also noted that in section WAC 173-443-030, definitions and acronyms have not been defined at this time.

We would like to provide options for definitions to “residential dehumidifier” that will provide clarification on the standalone dehumidifier product. Since hitting a 1/1/2024 deadline for conversion of our larger units would be extremely difficult, we were hoping for a definition that clearly pushes larger dehumidifiers constructed for the whole home, crawlspace, commercial, industrial and agricultural markets into the “air conditioning equipment” category with an effective date of January 1, 2025.

To this end, we have these suggestions for possible definitions:

1.) California Definition

For ease and consistency in the industry, the definition developed for California’s *Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary Air-conditioning, and Other End-Uses* could be used. It is found in Subarticle 5. § 95373 (a).

The general understanding of this definition is that it **excludes** any dehumidification unit that:

- Was built primarily for a purpose larger than residential and permanently installed,
- Was built as a portable unit for the flood restoration industry, even when temporarily used in a residential building,
- Was built to be permanently installed in a structure, including whole home dehumidifiers that are ducted into the residential HVAC system.

The only clarification this definition does not provide is if crawlspace dehumidifiers are included as “residential dehumidifiers”. Crawlspace dehumidifiers are often the same unit as a whole-home dehumidifier, except they are placed in the crawlspace below a home. Because they are not ducted and primarily built for residential dwellings, they can be considered to meet this definition. We would be happy to work with you to clarify this definition if crawlspace dehumidifiers were not intended to have an effective date of 1/1/2024.

2.) Modified California Definition

A slight variation on the California definition is to add the phrase “not permanently installed in a crawlspace or basement,” to the definition as such:

*“Residential Dehumidifier” means a residential air-conditioning product, other than a “portable air conditioner,” “room air conditioner,” or “packaged terminal air conditioner (PTAC),” that is a self-contained, electrically operated, portable, **not permanently installed in a crawlspace or basement**, and mechanically encased assembly consisting of:*

- (1) A refrigerated surface (evaporator) that condenses moisture from the atmosphere;*
- (2) A refrigerating system, including an electric motor;*
- (3) An air-circulating fan; and*
- (4) A means for collecting or disposing of the condensate.*

3.) Alternative Definitions

An alternative is to define the three dehumidifiers typically used in residential applications. All three of these would be covered by the efficiency regulations found in 10CFR430, but the first (i.e. consumer dehumidifier) is what is typically thought of as a “residential dehumidifier”. The next two definitions describe the unit made by us and others to be used as a whole-home or crawlspace dehumidifier.

Consumer/residential/portable dehumidifiers – these units are bought by consumer/homeowner directly from retail or on-line retailers. They are plugged in by the consumer so they are not subject to code inspection, and typically have built in means for collecting the condensate or have a drain hose run by the consumer.

Whole-home dehumidifiers – these are units designed for residential to light commercial use, are ducted into the HVAC system and typically installed by a contractor. They are often subject to code inspection. These units immediately dispose of condensate down a drain or with the aid of a condensate pump.

Crawlspace dehumidifiers – these are units designed to go in crawlspaces and unoccupied basements where they are unducted to remove moisture from that space before it enters the home. These are typically installed by a contractor and occasionally subject to code inspection. Crawlspace dehumidifiers are often the same as whole home dehumidifiers with the ducting removed. These units immediately dispose of condensate down a drain or with the aid of a condensate pump.

We thank you and the rest of the staff for your continued willingness to receive comment from us and the rest of the industry. We look forward to the next public meeting on March 24th. If there is any information we can ever provide that will help you in this process, do not hesitate to ask.

Respectfully submitted,

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