

**Bulletin ID:** CPB1902  
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**Date:** January 17, 2019  
**Title:** California Air Resource Board Ruling to Ban Certain High GWP Refrigerants

On December 27, 2018 the California Air Resource Board (CARB) passed a ruling to ban certain high GWP refrigerants, effective **JANUARY 1<sup>st</sup> 2019**. **The ban is in immediate effect** and impacts a number of units that Dover Food Retail sells to California. The specific refrigerants and application that are included in the January 1<sup>st</sup> 2019 ban are listed below:

END USE	REFRIGERANT	EFFECTIVE DATE
<i>Supermarket Systems (New)</i>	HFC-227ea, <b>R-404A</b> , R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, <b>R-507A</b>	<b>Prohibited as of January 1, 2019</b>
<i>Supermarket Systems (Retrofit)</i>	<b>R-404A</b> , R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, <b>R-507A</b>	
<i>Remote Condensing Units (New)</i>	HFC-227ea, <b>R-404A</b> , R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, <b>R-507A</b>	
<i>Remote Condensing Units (Retrofit)</i>	<b>R-404A</b> , R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, <b>R-507A</b>	
<i>Self-Contained medium temperature units with a capacity below 2,200 Btu/hr (New)</i>	FOR12A, FOR12B, <b>HFC-134a</b> , HFC227ea, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), <b>R-404A</b> , <b>R-407A</b> , R-407B, <b>R-407C</b> , <b>R-407F</b> , <b>R-410A</b> , R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-428A, R-434A, R-437A, R-438A, <b>R-507A</b> , RS-24 (2002 formulation), RS-44 (2003 formulation), SP34E, THR-03	
<i>Self-Contained units (Retrofit)</i>	<b>R-404A</b> , <b>R-507A</b>	

As a result, we need to proceed with the following steps, **effective immediately for California ONLY**:

- Existing quotes with prohibited refrigerants:
  - Work with internal teams to find an alternate refrigerant for the customer’s application.
- Future quotes:
  - Advise the customer of the ruling by CARB and ensure that acceptable refrigerants are used for the customer’s application.
- Existing orders with prohibited refrigerants:
  - Please make Scott Martin, Derek Gosselin and the Product Management leadership (Dustan Atkinson for Food Display/Specialty; Subodh Sharma for Systems & Self Contained) aware of the order details.
  - We will work to modify the refrigerant.

A Q&A that address key questions that your customers may have regarding this ruling is attached to this bulletin.

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## Commonly Asked Questions:

### Q1: What is the effective date for this regulation?

A: The ruling went into effect on 1/1/2019. The effective dates provided refer to the date the equipment was manufactured

### Q2: Does this regulation apply to only new equipment?

A: This regulation applies to both new equipment AND retrofits. The type of refrigerant prohibited is different in each situation and is outlined in the chart above.

### Q3: What is the definition of “new” equipment?

A: This regulation is applicable to “new” equipment and the following what is considered “new”:

- 1) Any refrigeration equipment that is first installed using new or used components (i.e. a new installation); or
- 2) Any refrigeration equipment that is modified such that it is:
  - (i) Expanded after the January 1st effective date, to handle an expanded cooling load by the addition of components in which the capacity of the system is increased, including refrigerant lines, evaporators, compressors, condensers, and other components; or
  - (ii) Replaced or cumulatively replaced after the January 1st effective date, such that the capital cost of replacing or cumulatively replacing components exceeds 50 percent of the capital cost of replacing the entire refrigeration system.

### Q4: What is the difference between a remodel and retrofit?

A: “Retrofit” is defined as the *replacement of the refrigerant* used in refrigeration equipment with a different refrigerant, and *any related changes to the refrigeration equipment* required to maintain its operation and reliability following refrigerant replacement. i.e. it is not permissible to change an existing R22 self-contained case to R404A/507

### Q5: Does it impact me if I am doing a remodel or replacing existing units during service/repair?

A: The regulation is for “new” installations and retrofits.

### Q6: Can I replace the condensing unit in an existing self-contained case under this regulation?

A: Yes. If an existing self-contained case needs a replacement condensing unit then the condensing unit can be replaced, even if the refrigerant is prohibited under the new regulation.

### Q7: Does this impact remote refrigerated display cases?

A: Remote cases are permitted if the equipment is for replacement orders such that the remodel is less than 50 percent of the capital cost to replace the entire refrigeration system. However, for new installations the remote cases need to match the refrigerant in the refrigeration system, which must comply with the regulations.

### Q8: What are the alternatives to R404A and R507A?

A: Lower GWP HFC/HFO blends (R448A/R449A) are options along with natural refrigerants.

### Q9: This mentions Retail Refrigeration; what about Industrial orders? Are they impacted?

A: No. Industrial, or Cold Storage are not impacted in 2019. However, effective January 1, 2023 the CARB will prohibit the use of R404A, R407A/B, R410A/B, R507A, among others for Cold Storage applications.

### Q10: What is going to be the next regulatory change in California?

A: January 1, 2020 will include a ban on the same refrigerants for both LT self-contained and MT self-contained greater than 2200 Btuh.

### Q11: If these are requirements for the state of California, do they impact me in other states?

A: For 2019 only California is impacted. However, many states that are part of the US Climate Alliance are actively making plans to follow California’s lead. New York, Maryland, Washington & Connecticut are the front runners in this effort.