



EPA SNAP REGULATIONS

What you need to know

Background

The United States Environmental Protection Agency (EPA) introduced its SNAP or **Significant New Alternatives Policy** starting in 2016 to find ways to regulate refrigerant use in various industries and help combat the increasing impact of climate change.

What does that mean for your business? That depends on current hydrofluorocarbon (HFC) regulations specific to your state. Additionally, global warming potential (GWP) plays a factor, as it is the new standard by which regulatory bodies are evaluating refrigerant usage. SNAP regulations are moving quickly into the cold storage and chiller air conditioning space, which will impact not only the types of refrigerants you can use, but the type of equipment you'll need for new installations, as well as retrofits.

The SNAP 23 breakdown:

Step 1:

If you're familiar with the SNAP regulations, you already know that SNAP 20 and 21, which delists R-404A and R-507A for specific applications by equipment type, are now in effect. SNAP 23 Step 1 formally adds R-448A/449A as allowed substitutes. To clear up any confusion, here is an overview:

Refrigeration Applications - PROPOSED ; pending petition disposition by EPA		
Product Category (New Equipment)	AR4 GWP Limit	Transition Date
Standalone/Self-contained Refrigeration Systems	SNAP Rules 20/21 Prohibitions	Jan. 1, 2022
Remote Refrigeration Systems (> 50 lbs. refrigerant charge)	1500	Jan. 1, 2022
Remote Refrigeration Systems (<= 50 lbs. refrigerant charge)	2200	Jan. 1, 2022
Industrial and Processing Refrigeration (without chillers)	1500	Jan. 1, 2022
ACIM (> 50lbs. refrigerant charge)	2200	Jan. 1, 2022
Transport Refrigeration	2200	Jan. 1, 2023

Exceptions: ACIM < 50 lbs. charge, Medical, Scientific and Research Applications

SNAP 20 - Food Retail/Service - New Installations

Application	Supermarket	Remote CDU (Split Systems)	Standalone Medium Temp <2,200 BTUH	Standalone Medium Temp >2,200 BTUH	Standalone Low Temp
Compliance Date	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019	Jan. 1, 2020	Jan. 1, 2020
Key Delisted Refrigerants	R-404A, R-507A	R-404A, R-507A	R-404A, R-507A	R-404A, R-507A	R-404A, R-507A
Key Acceptable Refrigerants	R-134A, R-407A/C/F, R-448A, R-449A, R-744	R-134A, R-407A/C/F, R-448A, R-449A	R-290, R-744, R-448A/449A*	R-290, R-744, R-448A/449A*	R-134A, R-290, R-448A, R-449A, R-744

*448A/449A allowed by letter of completeness per Lennox International (LII) effort and Air-conditioning, Heating & Refrigeration Institute (AHRI) memo of Jan. 1, 2019, but still not part of SNAP rule. Proposed to be subject to limited use in next rule – manufacturer must prove no other refrigerant would work.

SNAP 20 - Food Retail/Service - Retrofit Installations

Application	Supermarket	Remote CDU (Split Systems)	Standalone Medium Temp	Standalone Low Temp
Compliance Date	July 20, 2016	July 20, 2016	July 20, 2016	July 20, 2016
Key Delisted Refrigerants	R-404A, R-507A	R-404A, R-507A	R-404A, R-507A	R-404A, R-507A
Key Acceptable Refrigerants	R-134A, R-407A/C/F, R-448A, R-449A, R-744	R-134A, R-407A/C/F, R-448A, R-449A	R-134A, R-290, R-744, R-448A/449A*	R-134A, R-290, R-448A, R-449A, R-744

*448A/449A allowed by letter of completeness per LII effort and AHRI memo of Jan. 1, 2019, but still not part of SNAP rule. Proposed to be subject to limited use in next rule – manufacturer must prove no other refrigerant would work.

SNAP 21 - Cold Storage & Chiller Air Conditioning

Application	Refrigerated Food Dispensing Equipment	Refrigeration: Cold Storage Warehouse	Air-Conditioning: Positive Displacement Chillers
Compliance Date	Jan. 1, 2021	Jan. 1, 2023	Jan. 1, 2024
Key Delisted Refrigerants	R-134A, R-404A, R-407A, R-407C, R-407F, R-410A, R-507A	R-404A, R-407A, R-507A	R-134A, R-404A, R-407C, R-410A, R-507A
Key Acceptable Refrigerants	R-448A, R-449A	R-407 C/F, R-448A, R-449A, R-717, R-744	R-40A/F, R-448A, R-449A

Step 2:

The next phase - SNAP 23 Step 2 - will regulate GWP on refrigerants across a variety of product categories and applications. Limiting the GWP of refrigerants points to a more sustainable, energy efficient future for the refrigeration industry – and one where HFC usage will be difficult and costly for companies who fail to make the switch to Low GWP technologies.

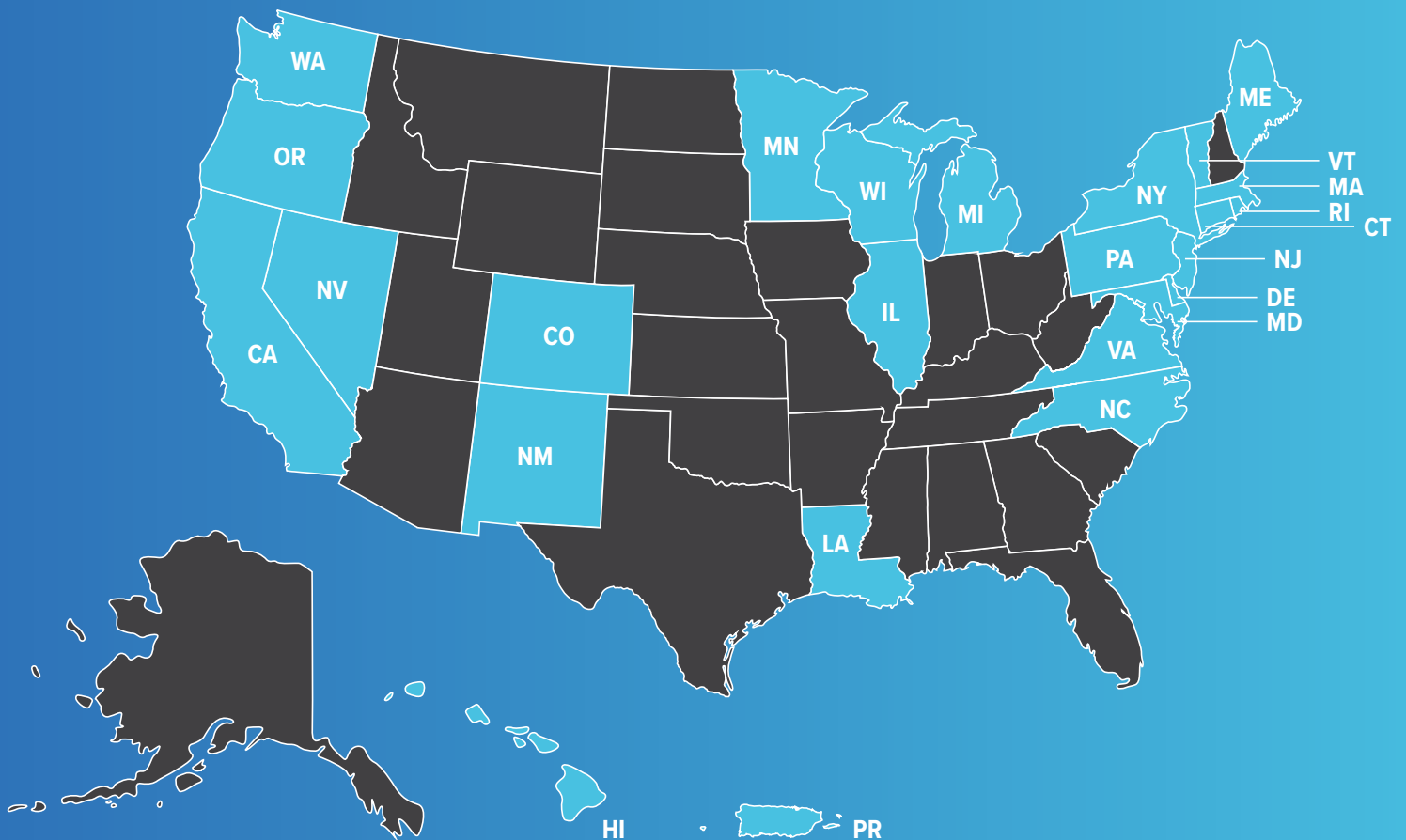
Key items of note for SNAP 23 Step 2 **PENDING** disposition of petitions by EPA:

- ▶ Refrigerants will be limited for new equipment to 150 GWP, and possibly 300 GWP for specific end use by equipment type.
- ▶ For affected end use cases, refrigerants will either be mildly flammable (A2Ls) or natural e.g. CO₂ and Propane.
- ▶ Safety standards will limit maximum charge size based on refrigerant flammability.
- ▶ Likely effective beginning in 2025, although 2026 is under consideration.

U.S. CLIMATE ALLIANCE WHAT IT MEANS FOR SNAP 23

The United States Climate Alliance (USCA) is a bi-partisan coalition of state governors committed to taking decisive action on climate change in accordance with the Paris Agreement. These states are strong indicators of SNAP adoption, and it's speculated other states will follow.

If you operate in a USCA state, it's important to keep up with SNAP regulations in your state, congressional activity on climate change policy and other regulatory factors.



For additional information on SNAP developments, what is happening in your state or other questions on how Low GWP regulations could impact your business, talk to the experts at Heatcraft at low-gwp@heatcraftprd.com



heatcraftprd.com/low-gwp

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