# HARDI HEATING AIR-CONDITIONING REFRIGERATION DISTRIBUTORS INTERNATIONAL

# Summary of New York State Final HFC Equipment and Refrigerant Prohibitions

Link to final regulations

#### **Brief Summary:**

The New York State Department of Environmental Conservation (DEC) has finalized rules to phase out the use of Hydrofluorocarbon (HFC) refrigerants and move to ultra-low GWP refrigerants in the future. The new regulations under Part 494 will dramatically impact HVACR products sold and installed in New York State. The final regulation impacts five main areas:

- Prohibitions on sales of bulk refrigerants (HFCs, HCFCs, and CFCs)
- Prohibitions on sales and installation of equipment using HFC refrigerants
- Labeling and disclosure requirements
- Recordkeeping and reporting requirements for manufacturers, producers, suppliers/distributors, and users of HFC refrigerants
- Leak repair requirements and an end-user refrigerant management program

### Information to note:

- <u>The rule goes into effect on January 9, 2025.</u> The rule is set to go into effect 30 days after the regulation was filed with the New York State Register. The final regulation was filed on December 10, 2024, and published on December 24, 2024.
- According to the DEC, the ban on bulk regulated substances does not apply to reclaimed refrigerants. End-users banking their recovered refrigerants can also use their recovered refrigerant as allowed under federal law.
- The equipment prohibitions apply to the manufacturing and sale of self-contained products and the installation of field-charged systems. This product and system classification is the same as the EPA's Technology Transition Rule.
  - Unlike the EPA rule, the DEC only provided a one-year sell-through for products manufactured before the prohibition date.
- Retrofits to lower GWP refrigerants are banned on January 1, 2029.
- Replacing an outdoor condensing unit is considered an installation of new air conditioning equipment requiring low-GWP replacement after the prohibition date.
- Other residential and commercial HVAC subsectors include heat pump water heaters, clothes dryers, pool or spa heaters, and dehumidifiers.
- Ultra-low temperature (-50° C or -58° F) exempt from equipment prohibition.
- New York State uses the GWP20 measurement instead of the widely used GWP100. However, some provisions refer to other laws that use GWP100. All references to GWP should contain a 20 or 100 identifier.
  - GWP20 values are from or calculated using the Intergovernmental Panel on Climate Change (IPCC) Assessment Report 6 (AR6).
  - GWP100 values are from or calculated using the IPCC AR4.

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Refrigerant	Туре	GWP100	GWP20
R-507A	HFC	3,985	7,290
R-404A	HFC	3,922	6,600
R-407A	HFC	2,107	4,500
R-410A	HFC	2,088	4,400
R-22	HCFC	1,960	5,310
R-407C	HFC	1,774	4,100
R-134a	HFC	1,430	3,810
R-448A	HFC/HFO	1,386	3,100
R-449A	HFC/HFO	1,396	3,100
R-32	HFC	675	2,530
R-452B	HFC/HFO	698	2,100
R-454B	HFC/HFO	465	1,700
R-454A	HFC/HFO	237	918
R-454C	HFC/HFO	146	565
R-471A	HFC/HFO	144	271
R-1234ze	HFO	1	4
R-1234yf	HFO	1	1
R-744 (CO <sub>2</sub> )	Non-fluorinated	1	1
R-600a (Iso-butane)	Non-fluorinated	<1	<1
R-290 (Propane)	Non-fluorinated	<1	<1
R-1270 (Propylene)	Non-fluorinated	<1	<1
R-717 (Ammonia)	Non-fluorinated	0	0

Table of common refrigerants with GWP100 and GWP20 values for reference from DEC:

## Bulk Virgin Refrigerant Prohibitions – Part 494 1.4(f):

Compliance with the bulk virgin refrigerant prohibitions is based on GWP level and the sale/transfer/receipt of refrigerants.

- DEC allows sales of reclaimed refrigerant after prohibition.
- End-users with recovered refrigerants can continue using recovered refrigerants in their systems, including those brought in from out-of-state. Recovered refrigerant in their possession is not a sale/transfer, and Part 494 1.2(c) allows end-users to continue to use products and equipment containing refrigerant acquired before the prohibition date to continue to use that product or equipment.
- The refrigerants listed are not an exhaustive list of prohibited refrigerants; confirm the GWP100 level of any refrigerant before sale.

GWP Limitation (Note	Prohibition	Common Banned Refrigerants
change to GWP20 in 2040)	Date	
Bulk regulated substances	<del>January 9,</del>	R-404A, R-507A, R-422B, R-125, R-410B*,
with a GWP100 ≥2,200	<del>2025</del>	R-438A
Bulk regulated substances	January 1,	R-410A, R-407A, R-407C, R-453A
with a GWP100 ≥1,500	2030	
Bulk regulated substances	January 1,	R-134a, R-448A, R-449A
with a GWP100 ≥750	2033	
Bulk regulated substances	January 1,	R-32, R-452B, R-454B
with a GWP20 ≥1600	2040	
		in the second se

\*R-410B is not a SNAP approved refrigerant, but has entered the market to avoid tariffs

Note: Nothing in this regulation requires a person that acquired a product or equipment containing a prohibited substance prior to the applicable date of prohibition listed in section 494-1.4 of this Part to cease use of that product or equipment.

# Equipment Prohibitions Summary – Part 494 1.4(e):

Compliance is split into two types, installation date and manufacture date with sell-through:

- No person may install a field charged system in New York State, nor have any such system be installed through their position as a designer, owner, or operator of that system, in the following sectors or subsectors that uses a prohibited substance as listed in the tables in subdivision 494-1.4(e) of this section after the prohibition date indicated.
- Effective one year after the prohibition date, no person may sell, distribute, offer for sale or distribution, make available for sale or distribution, purchase or receive for sale or distribution, or attempt to purchase or receive for sale or distribution in New York State any product that uses a prohibited substance as listed in the tables in subdivision 494-1.4(e) of this section.
- When DEC and EPA dates conflict, the more restrictive date applies.

Comparison of Table in Subdivision 494-1.4(e) with EPA Technology Transition Rule dates: (*Please note, only upcoming prohibitions and HVACR-relevant topics are listed*)

Sector/Subsector	NY State GWP Limit and	U.S. EPA GWP Limit and
	Deadline*	Deadline*
	*Prohibition dates apply to	*Prohibition dates apply to
	installation and	installation and
	manufacture, self-	manufacture, self-
	contained units have an	contained units have an
	additional one-year sell-	additional three-year sell-
	through	through
Chillers	For comfort cooling, >700	>700 GWP100 prohibited by
	GWP100 prohibited on	operating temperature:
	1/9/2025 (Chillers for	Comfort cooling: 1/1/2025
	refrigeration fall under	< -50 °C (-58 °F): exempt
	refrigeration categories)	-50 °C (-58 °F) to -30 °C (-22
		°F): 1/1/2028
		> -30 °C (-22 °F): 1/1/2026
	>20 GWP20 prohibited on	
	1/1/2030	
Heat Pump Chillers	For comfort cooling >700	Same as above, EPA does
	GWP100 prohibited on	not differentiate between
	1/9/2025	chillers and heat pump
	>20 GWP20 prohibited on	chillers
	1/1/2034	

**Air Conditioning** 

Sector/Subsector	NY State GWP Limit and	U.S. EPA GWP Limit and
	Deadline*	Deadline*
Residential and light	>700 GWP100 install	>700 GWP100
commercial air conditioning	prohibited on 1/1/26	manufacturing prohibited
and heat pumps – split	>10 GWP20 prohibited on	on 1/1/25 and install
systems	1/1/2034	prohibited on 1/1/26
Residential and light	>700 GWP100	>700 GWP100
commercial air conditioning	manufacturing prohibited	manufacturing prohibited
and heat pumps – package	on 1/1/26 and one-year sell-	on 1/1/25 and three-year
equipment	through	sell-through
	>10 GWP20 prohibited on	
	1/1/2034	
VRF systems (DEC does not	>700 GWP100 prohibited on	>700 GWP100
limit VRF systems to	1/1/2026	manufacturing prohibited
>65,000 Btus)	>10 GWP20 prohibited on	on 1/1/26 and install
	1/1/2030	prohibited on 1/1/27
Other residential HVAC	>10 GWP20 prohibited on	No similar EPA limitation
(includes heat pump water	1/1/2027	
heaters, pool and spa		
heaters, and clothes dryers)		
Other commercial HVAC	>10 GWP20 prohibited on	No similar EPA limitation
(includes heat pump water	1/1/2034	
heaters, clothes dryers, and		
dehumidifiers)		
Data centers	>2690 GWP20 prohibited on	>700 GWP100, install
	1/1/2026	prohibition on 1/1/2027
	>10 GWP20 prohibited on	
	1/1/2030	

Sector/Subsector	NY State GWP Limit and	U.S. EPA GWP Limit and
	Deadline*	Deadline*
Refrigerated food	R-402A, R-402B, R-404A, R-	R-402A, R-402B, R-404A, R-
processing and dispensing	407A, R-407B, R-407C, R-	407A, R-407B, R-407C, R-
equipment	407F, R-407H, R-408A, R-	407F, R-407H, R-408A, R-
	410A, R-410B, R-411A, R-	410A, R-410B, R-411A, R-
	411B, R-417A, R-417C, R-	411B, R-417A, R-417C, R-
	420A, R-421A, R-421B, R-	420A, R-421A, R-421B, R-
	422A, R-422B, R-422C, R-	422A, R-422B, R-422C, R-
	422D, R-424A, R-426A, R-	422D, R-424A, R-426A, R-
	427A, R-428A, R-434A, R-	427A, R-428A, R-434A, R-
	437A, R-438A, R-507A,	437A, R-438A, R-507A,
	HFC-134a, HFC-227ea, R-	HFC-134a, HFC-227ea, R-
	125/290/134a/600a	125/290/134a/600a
	(55/1/42.5/1.5), RB-276, RS-	(55/1/42.5/1.5), RB-276, RS-
	24 (2002 formulation), RS-	24 (2002 formulation), RS-
	44 (2003 formulation),	44 (2003 formulation),
	GHG-X5, Freeze 12	GHG-X5, Freeze 12
	prohibited on 1/1/2027	prohibited on 1/1/2027
	>10 GWP20 prohibited on	
	1/1/2034	
Supermarkets	≥50 pounds of refrigerant:	≥200 pounds of refrigerant:
	>580 GWP20 prohibited on	>150 GWP100 prohibited on
	1/1/2026	1/1/2027
	<50 pounds of refrigerant:	<200 pounds of refrigerant:
	>943 GWP20 prohibited on	>300 GWP100 prohibited on
	1/1/2026	1/1/2027
	>10 GWP20 prohibited on	High temperature side of
	1/1/2034	cascade systems: >300
		GWP100 prohibited on
		1/1/2027

# Refrigeration

Sector/Subsector	NY State GWP Limit and	U.S. EPA GWP Limit and
	Deadline*	Deadline*
Refrigeration - Remote Condensing Units	≥50 pounds of refrigerant: >580 GWP20 prohibited on 1/1/2026	≥200 pounds of refrigerant: >150 GWP100 prohibited on 1/1/2026
	<50 pounds of refrigerant: >943 GWP20 prohibited on 1/1/2026	<200 pounds of refrigerant: >300 GWP100 prohibited on 1/1/2026
	>10 GWP20 prohibited on 1/1/2034	High temperature side of cascade system: >300 GWP100 prohibited on 1/1/2026
Stand-alone units – medium temperature	<ul> <li>&gt;150 GWP100 prohibited on</li> <li>1/9/2025</li> <li>&gt;10 GWP20 prohibited on</li> <li>1/1/2034</li> </ul>	>150 GWP100 prohibited on 1/1/2025
Stand-alone units – low- temperature	<ul> <li>&gt;150 GWP100 prohibited on</li> <li>1/9/2025</li> <li>&gt;10 GWP20 prohibited on</li> <li>1/1/2034</li> </ul>	>150 GWP100 prohibited on 1/1/2025
Cold storage warehouses	≥50 pounds of refrigerant: >580 GWP20 prohibited on 1/1/2026	≥200 pounds of refrigerant: >150 GWP100 prohibited on 1/1/2026
	<50 pounds of refrigerant: >943 GWP20 prohibited on 1/1/2026	<200 pounds of refrigerant: >300 GWP100 prohibited on 1/1/2026
	>10 GWP20 prohibited on 1/1/2034	High-temperature side of cascade system: >300 GWP100 prohibited on 1/1/2026
Ice rinks	<ul><li>&gt;580 GWP20 prohibited on</li><li>1/1/2026</li><li>&gt;10 GWP20 prohibited on</li><li>1/1/2030</li></ul>	>700 GWP100 prohibited on 1/1/2025

Sector/Subsector	NY State GWP Limit and	U.S. EPA GWP Limit and
	Deadline*	Deadline*
Industrial process refrigeration	≥50 pounds of refrigerant: >580 GWP20 prohibited on 1/1/2026	≥200 pounds of refrigerant: >150 GWP100 prohibited on January 1, 2026
	<50 pounds of refrigerant: >943 GWP20 prohibited on 1/1/2026	<200 pounds of refrigerant: >300 GWP100 prohibited on January 1, 2026
	>10 GWP20 prohibited on 1/1/2034	High temperature side of cascade systems and temperature of the refrigerant entering the evaporator above -30 °C (- 22 °F): >300 GWP100 prohibited on 1/1/2026 Temperature of the refrigerant entering the evaporator from -50 °C (-58 °F) to -30 °C (-22 °F): >700 GWP100 prohibited on
		1/1/2026 Temperature of the refrigerant entering the evaporator below -50 °C (- 58 °F): No restriction
Industrial process refrigeration – chillers	>943 GWP20 prohibited on 1/1/2026 >10 GWP20 prohibited on 1/1/2030	See Chillers above for EPA rules
New refrigeration facility (≥200 pounds of refrigerant)	>10 GWP20 prohibited on 1/1/2026	No similar EPA category

Sector/Subsector	NY State GWP Limit and	U.S. EPA GWP Limit and
	Deadline*	Deadline*
Automatic Commercial Ice	Batch type producing	Batch type producing
Makers – self-contained	<1,000 pounds per 24 hours	<1,000 pounds per 24 hours
	or continuous type	or continuous type
	producing <1,200 pounds	producing <1,200 pounds
	per 24 hours: >150 GWP100	per 24 hours: >150 GWP100
	prohibited on 1/1/2026	prohibited on 1/1/2026
	Batch type producing	Batch type producing
	≥1,000 pounds per 24 hours	≥1,000 pounds per 24 hours
	or continuous type	or continuous type
	producing≥1,200 pounds	producing≥1,200 pounds
	per 24 hours: R-402A, R-	per 24 hours: R-402A, R-
	402B, R-404A, R-407A, R-	402B, R-404A, R-407A, R-
	407B, R-407C, R-407F, R-	407B, R-407C, R-407F, R-
	408A, R-410A, R-410B, R-	408A, R-410A, R-410B, R-
	411A, R-411B, R-417A, R-	411A, R-411B, R-417A, R-
	417C, R-420A, R-421A, R-	417C, R-420A, R-421A, R-
	421B, R-422A, R-422B, R-	421B, R-422A, R-422B, R-
	422C, R-422D, R-424A, R-	422C, R-422D, R-424A, R-
	426A, R-428A, R-434A, R-	426A, R-428A, R-434A, R-
	437A, R-438A, R-442A, R-	437A, R-438A, R-442A, R-
	507A, HFC-134a, R-	507A, HFC-134a, R-
	125/290/134a/600a	125/290/134a/600a
	(55/1/42.5/1.5), RB-276, RS-	(55/1/42.5/1.5), RB-276, RS-
	24 (2002 formulation), RS-	24 (2002 formulation), RS-
	44 (2003 formulation),	44 (2003 formulation),
	GHG-X5, G2018C, or Freeze	GHG-X5, G2018C, or Freeze
	12 are prohibited on 1/1/	12 are prohibited on 1/1/
	2027	2027
Automatic Commercial Ice	R-402A, R-402B, R-404A, R-	R-402A, R-402B, R-404A, R-
Makers – remote	407B, R-408A, R-410B, R-	407B, R-408A, R-410B, R-
condensing unit	417A, R-421A, R-421B, R-	417A, R-421A, R-421B, R-
	422A, R-422B, R-422C, R-	422A, R-422B, R-422C, R-
	422D, R-424A, R-428A, R-	422D, R-424A, R-428A, R-
	434A, R-438A, R-507A, R-	434A, R-438A, R-507A, R-
	125/290/134a/600a	125/290/134a/600a
	(55/1/42.5/1.5), RS-44	(55/1/42.5/1.5), RS-44
	(2003 formulation), or GHG-	(2003 formulation), or GHG-
	X5 prohibited on 1/1/ 2027	X5 prohibited on 1/1/2027

#### Exemptions to the above prohibitions:

Subsector	Regulated Substance	Acceptable Uses
Air conditioning -	HFC–134a	Military marine vessels where reasonable
Chillers		efforts have been made to ascertain that
		other alternatives are not technically
		feasible due to performance or safety
		requirements.
Air conditioning -	HFC-134a and R404A	Human-rated spacecraft and related
Chillers		support equipment where reasonable efforts have been made to ascertain that
		other alternatives are not technically
		feasible due to performance or safety
		requirements.
All Subsectors	Any substance	Products after a period of ordinary
	prohibited from use in	utilization or operation by a consumer; or
	equipment listed in the	products within the disposal or recycling
	above table (Part 494-	chain. (Used equipment)
	1.4(e))	
All Sectors	Any substance	Very low temperature applications
	prohibited from use in	
	equipment listed in the	
	above table (Part 494-	
All Sectors	1.4(e))	Systems retrofitted to use a lower CM/D20
All Sectors	Any substance prohibited from use in	Systems retrofitted to use a lower GWP20 substitute, until January 1, 2029.
	equipment listed in the	substitute, unit bandary 1, 2029.
	above table (Part 494-	
	1.4(e))	
Airconditioning	Any substance	The prohibition date is extended one year
and Refrigeration	prohibited from use in	for the installation of a system with a
Sectors	equipment listed in the	prohibition date that occurs prior to
	above table (Part 494-	January 1, 2027, when an approved
	1.4(e)(2) and (3))	building permit issued prior to the effective
		date of this Part specifies the use of a
		restricted regulated substance, or blend
		containing a regulated substance, in a
		system detailed in that permit.

### Variances

The regulation includes a variance process that can take up to 120 days to complete. Variances are allowed for impossibility, force majeure events, and economic hardship. A full list of requirements to qualify for a variance are available on page 42.