

Frequently Asked Questions



Department of
Environmental
Conservation

Part 494 – Updated May 2025

Hydrofluorocarbons (HFCs) are potent greenhouse gases often used in refrigeration and cooling equipment. HFCs have a global warming potential (GWP) – a metric that measures the ability of gases to trap heat in the atmosphere – hundreds to thousands of times higher than carbon dioxide. HFCs and other high GWP substances are used in a variety of home and commercial products and equipment. The Part 494 HFC Standards and Reporting regulation adopted in January 2025 will help control emissions of HFCs and substitutes that contribute to global climate change.

This document provides regulated entities with answers to commonly asked questions and may be revised as more information becomes available. Regulated entities are responsible for complying with all requirements of Part 494 and should review the regulation on DEC's website: <https://on.ny.gov/climateregs>

Where is the Part 494 regulation located?

All regulatory documents are available on DEC's website: <https://on.ny.gov/climateregs> or by requesting copies from DEC by emailing climate.regs@dec.ny.gov.

What is the effective date of the Part 494 regulation?

The original Part 494 regulation went into effect in 2020 and included prohibition dates through 2024. The new, amended regulation went into effect on January 9, 2025 and includes additional prohibition dates and other deadlines that range from this effective date through 2035. Deadlines in the amended rule that refer to the "effective date" are referring to January 9, 2025. Some prohibition dates match those in other state and federal regulations. See the regulation and Factsheet on <https://on.ny.gov/climateregs> for additional detail. All deadlines reflect multiple years of outreach and public comment, as described in the Assessment of Public Comment and Regulatory Impact Statement.

Where can I register, apply for a variance, and/or submit reports?

DEC is developing electronic forms that will be posted along with instructions on DEC's website. Visit <https://on.ny.gov/fgasreporting> for more information and to sign-up to receive updates on this rule and related announcements.

Who is required to report under the Refrigerant Management Program?

If you own or operate a facility with equipment that contains 50 pounds or more of refrigerant, you may be required to report under the Refrigerant Management Program (Section 494-2.2 through 2.7). Supermarket chains are required to participate in both the Refrigerant Management Program and the Supermarket Refrigerant Program (Section 494-2.8). See <https://on.ny.gov/fgasreporting> for a list of upcoming deadlines, forms, and additional assistance. Only one registration is required per facility, but you may submit multiple registrations as needed to cover all equipment. If the owner and operator are different persons, the operator may complete the registration on behalf of the owner or vice versa. Multiple persons may wish to file separate registrations for the same facility, such as if a facility has multiple tenants. For example, the owner of the facility may register a central heating and cooling system, while a tenant separately registers a refrigeration system that the tenant controls. The definitions for owner, operator, and facility are provided in Section 494-1.3. If multiple entities may be considered the "owner" of a facility, register the entity that owns the equipment that is covered by this rule.

What if I don't have the information requested, such as the amount of refrigerant contained in my equipment?

Provide the best information that is available. If you do not have any information or you are uncertain, attach a brief explanation when submitting the form in the "Additional Information" section. There are also multiple options for estimating refrigerant charge. Review the definition of "refrigerant charge capacity" in Section 494-1.3(73) and select the option that is most appropriate for your equipment.

What types of entities are considered “suppliers” or “distributors” subject to the registration, reporting, and record-keeping in Section 494-1.7?

In the Part 494 regulation, suppliers include producers, manufacturers, or distributors of bulk regulated substances or product/systems that contain or are intended to contain those substances. Distributors include, but are not limited to, persons who import these items into New York to distribute them in this state. Persons that provide repair services and do not import bulk regulated substances from out of state are not “distributors” and are not required to report under Section 494-1.7. Entities that intend to import and distribute regulated substances, even at no charge, must register and report this information.

Who is required to register if my products are manufactured by a separate entity?

While manufacturers produce a product in its final form, they may do this on behalf of a marketer or other entity that is indicated on the label. This regulation only applies to entities that own and are in control of the products that they intend to sell in New York State. If a manufacturer does not intend to sell products in New York State, it is not subject to Part 494. In this case, the marketer must register and report as the “manufacturer” and provide information on any applicable manufacturing facilities.

What are the deadlines for buying and selling bulk regulated substances?

The Department issued an enforcement discretion regarding certain provisions related to this prohibition. See the DEC website for the full Enforcement Discretion letter dated January 31, 2025. <https://on.ny.gov/climateregs>

Any person who intends to buy, sell, or distribute containers of virgin (not reclaimed) bulk regulated substances may be in violation if the sale takes place after the applicable prohibition dates in Section 494-1.4(f). These deadlines are in January 2025, 2030, 2033, and 2040. The first prohibition date applies to substances with a 100-Year Global Warming Potential (GWP) greater than 2200, as defined in California Health & Safety Code Section 39735. This includes bulk containers of R-404a and R-507, but not virgin substances or those with a GWP100 less than 2200 such as R-410a. The prohibition on containers does not apply to the servicing of equipment and there is no prohibition on the sale of repair services. Other requirements may apply. Servicers may not purchase, sell, or distribute containers of virgin, bulk regulated substances except as part of a service repair after the applicable prohibition date. The supply of substances per Section 494-1.7 must also be reported (see above).

Am I prohibited from using bulk regulated substances or the products and equipment listed in Part 494?

No. Part 494 includes controls on the sale and distribution of covered substances, products, and equipment for commercial purposes. There is no restriction, prohibition, or deadline in Part 494 on using any substance, product, or equipment. There is also no prohibition on servicing equipment including if the substances were purchased by the same business prior to the prohibition date, such as if they are in storage.

What about storing, transporting, or renting?

As with the original Part 494 regulation adopted in 2020, the amended regulation does not regulate the storage or shipment of substances, products, or equipment in or through New York State if they are not intended to enter commerce in New York State. This may include transporting items to or from vessels at ports, transshipments through New York State, or storage in service vans. However, items that are intended for sale in New York State may need to be reported. Persons transporting these items should maintain appropriate documentation. There are also no prohibitions on using or renting equipment, but the owners and/or operators may be subject to refrigerant management requirements under Sections 494-2.2 through 2.8.

What if I cannot service or replace my equipment due to shortages?

Businesses and consumers should be aware that HFC substances are being phased out worldwide. Shortages are expected as the United States Environmental Protection Agency (USEPA) implements the US AIM Act. There are also other New York State, national, and international laws to transition away from HFCs. For example, R-404a and R-507a were prohibited from use in new and retrofitted equipment starting in 2021 per the original Part 494 regulation in 2020. Similar federal prohibitions are being phased in nationwide per 40 Part 84.54.

Can the labeling and disclosure requirements be met by complying with federal regulations?

The federal labeling requirements in 40 CFR Part 84.58 are similar to those in Section 494-1.6, but they are not the same. Where the federal requirements meet or exceed DEC’s requirements, federal requirements may be used. Where the federal requirements provide less or different information than is required in Part 494, the Part 494 requirements must be followed. For example, the threshold values allowed in 40 CFR Part 84.58(a) would not be sufficient to estimate the refrigerant charge capacity as required in Section 494-1.6(c). Part 494 also includes disclosure requirements for components of systems, as in the original (2020) regulation.

When do the prohibitions on new equipment go into effect? Does this apply to components?

The prohibition dates listed in Section 494-1.4(a) through (e) apply to new products (factory-charged) and systems (charged on-site). Examples of products are household refrigerators or window air-conditioners. New products cannot be sold in New York State if the date of manufacture (the date the product is completed at the factory) is after the prohibition date. This applies to all products, not only those manufactured in New York State.

If a piece of equipment is not completed at a factory but instead needs to be assembled on-site in New York State in order to function, then it is not a product, it is a system. Equipment systems are assembled from components. Some examples of systems are supermarket racks and central or split air-conditioning and heat pumps with indoor and outdoor units. Components are not themselves subject to the prohibitions in Part 494. However, a system may be considered to be “new” if it is first installed after a prohibition date or if the components have been largely or entirely replaced, following the definition of “new” in Section 494-1.3(a)(54).

Does the prohibition on new refrigeration facilities refer to the facility or the equipment?

Commercial refrigeration equipment may be prohibited from being installed in newly constructed or repurposed facilities per Section 494-1.4(e)(3)(xviii) if that piece of equipment will contain more than 200 pounds of a regulated substance (GWP20 greater than 10). This applies to individual systems, not to the amount of refrigerant that may be contained across all systems in the facility. Systems with 50 pounds or more of refrigerant will be subject to the leak management requirements in Section 494-2. There are no restrictions on the substances with a GWP20 less than 10 that are widely available for the refrigeration sector, such as R-744.

Are residential dehumidifiers included in “residential and light commercial air conditioning and heat pumps” (or residential A/C)? What about water heaters?

Yes, one goal of the Part 494 regulation is to backstop and align with the federal regulations, which prohibits residential A/C and dehumidifiers with a GWP100 greater than 700 starting on January 1, 2025. USEPA later extended the prohibition one additional year to January 1, 2026, but only for A/C systems. Part 494 adopted the later date for all products and systems in both of these subsectors. Part 494 also provided a later prohibition date of January 1, 2034 for commercial dehumidifiers (Section 494-1.4(e)(2)(viii)) based on stakeholder feedback.

Per the definitions in Section 494-1.3, air-conditioning equipment includes equipment “that cools, heats, or dehumidifies space or water.” The subsector referred to as “Other Residential HVAC” covers equipment that the federal government intends to regulate separately. The definition of this subsector includes domestic water heating, pool or spa heating, and clothes drying. If a system is used to both condition space and heat water, then it falls in the “residential and light commercial air conditioning and heat pumps” subsector.

Are air-to-water heat pumps a type of “heat pump chiller”?

No. Terms such as “air-to-water” are not used in the regulation because they do not have a standard definition. Instead, the Part 494 regulation uses terms from federal regulations, such as “residential and light commercial air conditioning and heat pumps,” which covers all types of heat pumps other than “VRFs” and “chillers.” Part 494 added “heat pump chiller” in response to public comment that there should be a common prohibition timeline for all systems that provide heating as well as cooling. The definition of “chiller” or “heat pump chiller” does not include equipment types that may be considered “residential and light commercial air-conditioning and heat pumps,” even if they are hydronic systems.

Are there exemptions such as for projects with building permits? What permits are acceptable?

The exemptions to Part 494 can be found in Section 494-1.5. One of the exemptions applies when there was a building permit in hand before January 9, 2025. In this case, the prohibitions in 2025 and 2026 on new air-conditioning or refrigeration equipment are extended one year to complete the permitted project. The building permit must specify the regulated substance. The Department will accept references in the permit related to the regulated substance, such as ASHRAE safety class. Consistent with EPA, DEC will consider other official approvals. DEC has consulted with the New York City Department of Buildings (NYCDOB) and considers the following as eligible for this exemption: a) projects with an NYCDOB approved or permitted “main” application or b) NYCDOB approval of all work types. Contact DEC at climate.regs@dec.ny.gov for assistance. This exemption is based on the more limited federal exemption in 40 CFR Part 84.54 for permits acquired before October 2023. The Department added this exemption in the final rule to provide additional compliance options for projects nearing completion.

EPA has updated its rules. How do I determine which version is referenced in Part 494?

Please see Section 494-1.11 for the effective date of each law, rule, or document that is referenced in Part 494 and where to obtain copies. Part 494 only adopts the terms of those laws or rules that were in place on that

effective date. Updates are not automatically adopted. Changes to federal regulations are not automatically incorporated into Part 494.

Who is responsible for compliance?

The regulated entities for this rule are all persons as defined in Section 494-1.3(a)(61) who may undertake an action subject to a requirement in the law, such as any person who intends to sell a prohibited product, system, or substance or commercial owners or operators of covered equipment.

What if I can't comply?

Regulated entities are encouraged to email climate.regs@dec.ny.gov for assistance. You may meet the criteria to apply for a variance per Section 494-1.8 (see below) or DEC may also be able to assist you in becoming compliant if you voluntarily disclose any violations. The Department's Environmental Audit Incentive program (Commissioners Policy 59) is also available <https://dec.ny.gov/regulatory/guidance-and-policy-documents/environmental-permits/commissioner-policy-59>.

The Small Business Environmental Support Office (SBESO) offers FREE and CONFIDENTIAL assistance to small businesses related to compliance under this regulation. Call 1-877-247-2329 or email SBESO@esd.ny.gov. SBESO can also provide guidance when responding to regulatory violations and enforcement actions.

Who can apply for a variance?

Any regulated entity may apply for a variance. Variance applications may cover multiple projects and there is no restriction on coordination among entities in developing a variance application. Trade groups are not eligible to apply for a variance. Note: variance applications must refer to a specific, applicable requirement or prohibition in the Part 494 regulation. DEC will not consider applications that refer generally to HFC usage or that are not related to one of the applicable requirements or prohibitions listed in Section 494-1.8(a).

How do I report a violation?

Violations of the Part 494 regulations may be reported to climate.regs@dec.ny.gov or anonymously by following the instructions at <https://dec.ny.gov/environmental-protection/report-a-problem>.

New Equipment Installations

What if I can't install a new HVAC-R system before the prohibition date?

Part 494 includes two specific provisions that may be relevant to new equipment installations. Section 494-1.5(a)(12) includes an exemption for projects that received a building permit or approvals and Section 494-1.8 describes a process for applying for a variance. See related questions above.

What if I don't qualify for the exemption?

If it is unlikely that the HVAC-R system included in the building design can be installed before the applicable prohibition date in Section 494-1.4(e), then eligible applicants may apply for a variance based on impossibility as described in Section 494-1.8. There are two other types of variances, which are less applicable. Force majeure applies in emergency circumstances, such as unforeseen supply shortages due to extreme weather. Economic hardship applies to small businesses in NYS disadvantaged communities where the cost of compliance could result in the closure of a facility.

What types of projects are eligible for an impossibility variance?

Projects that are significantly underway prior to the effective date of the regulation and that cannot comply with the requirements may be eligible for an impossibility variance. The criteria for the impossibility variance include that there is no compliant substance or equipment available, that there will be no increase in the overall risk to human health or the environment, and that all best efforts have been taken to anticipate and address the requirements of the regulation. The variance application must demonstrate the criteria above and include a compliance plan, assessment of greenhouse gas emissions, and a plan for mitigating those emissions and impacts as described in Section 494-1.8. Mitigation should seek to address refrigerant emissions and impacts.

Automatic Leak Detection (ALD) Requirements

What is ALD?

Automatic Leak Detection (ALD) is as an alternative to manual leak monitoring and is widely used in commercial refrigeration. ALD requirements are in Sections 494-2.2 through 2.7 of the Refrigerant Management Program. For information on related EPA regulations (40 CFR Part 82.157 and 84.108), see <https://www.epa.gov>. While EPA

rules are discussed in the following answers, those rules should be reviewed for information relating to those requirements, and questions should be directed to EPA.

Who can use ALD?

Anyone can use ALD to manage their leaks and to meet the leak monitoring requirements in Section 494-2.3.

Who is required to use ALD?

ALD is required for “large” refrigeration equipment containing 1,500 pounds or more of refrigerant that is a regulated substance. Regulated substances are those with a GWP greater than 10. The deadline for installation in New York is June 1, 2025. See the factsheet at <https://on.ny.gov/fgasreporting> for a list of common regulated substances. Part 494 does not regulate refrigerants that have a GWP less than or equal to 10, such as natural refrigerants like R-744, and there are no leak management requirements for those substances. The charge size threshold of 1,500 pounds refers to individual systems or refrigerant circuits, not to the amount of refrigerant that may be contained across all systems in the facility.

Is both “direct” and “indirect” ALD allowed?

Yes, EPA and DEC regulations include both direct and indirect ALD, although these terms are not specifically used in Part 494. Direct ALD monitors refrigerant itself while indirect ALD monitors other inputs such as pressure or temperature. This includes sensor and non-sensor based methods. Contact DEC if you have questions.

Does the entire refrigeration or air-conditioning system need to be monitored for leaks?

Yes. The entire refrigerant circuit must be monitored so that any leaks can be located and properly repaired. However, DEC is not requiring that direct ALD systems monitor all components at this time, recognizing that refrigerant sensors are not effective for low probability, outdoor components. See the Enforcement Discretion on this issue released on April 23, 2025 and available at <https://on.ny.gov/climateregs>. If your current ALD system cannot continuously monitor all potential sources of leaks, such as outdoor units, you may need manual monitoring or multiple ALD systems to locate and repair leaks.

What is the ALD required to monitor?

If you are required to use ALD or are using ALD as an alternative to manual monitoring requirements, you must meet the following requirements. EPA and DEC regulations refer to specific components in which ALD sensors or intakes must monitor continuously the air in proximity to compressors, evaporators, condensers, and other areas with a high potential for a refrigerant leak (see 40 CFR Part 84.108(d), 6 NYCRR Section 494-2.3(d)(1)). If these are the only portions of the system that are being monitored, you may either install additional ALD systems or perform manual leak checks as otherwise specified in the regulation (see 40 CFR 84.108(h)(3)) and 6 NYCRR Section 494-2.3(d)(4)). You may attach additional documentation to your registration form to describe to DEC the limits of your ALD, including any components that are not covered by the ALD system and the plan for monitoring these. This approach is consistent with long-standing EPA requirements for ALD (40 CFR 82.157(g)(4)(iii)).

ALD Registration, Reporting, and Annual Calibration

What if I have difficulty complying and I can't install an ALD by the deadline?

The electronic registration form will allow you to submit additional information or documents. You can use this to provide DEC with a description of any problems and expected timeline for compliance, or when you expect the ALD to be installed. DEC may follow up with you as needed.

What information will I need to provide to DEC on the ALD system?

DEC is developing electronic reporting forms that will be available at <https://on.ny.gov/fgasreporting>. Owners or operators of large refrigeration equipment must indicate that they have the required ALD installed or provide additional information if the system has not been installed. There are also requirements to record and report the results of annual calibration. DEC also requests that entities provide additional information on your ALD, such as the manufacturer, model info, and specifications if applicable; if the ALD is direct, indirect, a combination, or other; the install year; and notification information such as if there is an alarm and who is notified. This information will be used to inform future programs, such as to provide technical support for ALD users.

What are the requirements for calibration? What records will I need to provide?

EPA and DEC regulations specify that the ALD system must be calibrated annually using the manufacturer-recommended procedures, so that it achieves the required detection threshold. Direct ALD must detect a concentration level of 10 parts per million and indirect ALD must detect a loss of refrigerant of 50 pounds or 10% of the refrigerant charge (see 40 CFR Part 84.108(d), (f), and (g) and 6 NYCRR Section 494-2.3(d)(1) and (2)).

Contact the manufacturer if the system is not providing sufficient information to document a successful calibration that the detection threshold has been reached.

The intent of annual reporting is to document that the ALD is working properly and as required. Record your annual calibration audit as you would any other equipment servicing, recording the date and type of service (i.e., ALD calibration) and name of the person providing the service.

Are there any other requirements for ALD systems?

Leaks must be addressed per the requirements in Sections 494-2.4 and 2.5 and DEC may request records as required per Section 494-2.7. For example, if annual refrigerant loss exceeds standard leak rates, the leak detection system may not be effective, and more information may be needed. The standard leak rates are 20% per year for refrigeration systems and up to 10% for air-conditioning systems (see Section 494-1.3(a)(47)(i)).

Other Questions about ALD

What should I consider when selecting an ALD system?

You must be able to gather enough information to locate leaks and minimize annual refrigerant loss. This applies to ALD and to manual leak detection. You are also not restricted from applying multiple methods, or layering ALD and manual monitoring as needed to address leaks.

Who is responsible for compliance?

Owners or operators of covered equipment (see Section 494-2.1, Applicability) are responsible for compliance with the Refrigerant Management Program in Sections 494-2.2 through 2.7, including leak detection. Contact DEC if you need assistance with compliance. Although there are no requirements for manufacturers of leak detection equipment in this rule, you may report fraudulent activities to the New York State Attorney General at <https://ag.ny.gov/file-complaint> and share your complaint with DEC.

Can I apply for a variance from the ALD requirements?

No, the variance provision includes certain leak repair requirements in Sections 494-2.4 and 2.5 of the Refrigerant Management Program, but not the ALD requirements. See Section 494-1.8 for information on the variance process.