

Express Terms

6 NYCRR Part 494 Hydrofluorocarbon Standards and Reporting

(Statutory authority: Environmental Conservation Law, §§ 1-0101, 1-0303, 3-0301, 19-0103, 19-0105, 19-0107, 19-0301, 19-0303, 19-0305, 71-2103, 71-2105, 75-0101, 75-0105, 75-0107, 75-0109)

A new Subpart 494-1 is added.

Subpart 494-1 General Provisions

Sections 494.1 through 494.6 are renumbered as 494-1.1 through 494-1.6 and amended as follows.

§ 494-1.1 Purpose

(a) This Part adopts prohibitions and other controls for [certain] hydrofluorocarbons and other greenhouse gases [substances] in air conditioning and refrigeration equipment, aerosol products [propellants], and foam [end-uses] subsectors.

(b) The purpose of this Part is to control the emissions of greenhouse gases as a component of air pollution and driver of climate change, and to provide for the protection of the environment and natural resources of the State.

(c) It is the further purpose of this Part to implement recommendations from the Climate Action Council Scoping Plan finalized per section 75-0103 of the Environmental Conservation Law.

§ 494-1.2 Applicability

(a) This Subpart applies to any person who sells, imports, leases, rents, manufactures, distributes for sale, offers for sale, makes available for sale or distribution, purchases or receives for sale or distribution, or attempts to purchase or receive for sale or distribution, installs, or that owns, operates, or uses for commercial purposes

or otherwise enters into commerce in the State of New York, any product, equipment, material, or regulated substances listed in section [494.4] 494-1.4 of this Part.

(b) Regulated [S]substances used in [end-uses] subsectors listed in section [494.5] 494-1.5 of this Part are exempt from the prohibitions listed in section [494.4] 494-1.4 of this Part.

(c) [Except where an existing system is retrofit after the applicable prohibition date, n] 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 [494.4] 494-1.4 of this Part to cease use of that product or equipment. [Products or equipment manufactured prior to the applicable prohibition specified in listed in section 494.4 of this Part may be sold, imported, exported, transported, distributed, installed, serviced, and used after the applicable prohibition date.]

(d) This Subpart also applies to any person who distributes or reclaims regulated substances.

§ 494-1.3 Definitions

(a) For the purposes of this Part, the following definitions apply:

(1) ‘ACIM – remote.’ Remote automatic commercial ice machines (ACIM) are commercial refrigeration equipment which uses a split-system design where the evaporator is located indoors, while the condensing unit is located outdoors via interconnected refrigerant piping.

(2) ‘ACIM – self-contained.’ Self-contained automatic commercial ice machines (ACIM) are commercial refrigeration equipment in which an ice-making and storage mechanism is contained within an integral cabinet. Self-contained ACIM are products that contain both evaporator and condenser, have no external refrigerant connections, and are entirely factory-charged and factory-sealed with refrigerants.

[(a)](3) 'Aerosol [P]propellant.' A liquefied or compressed gas product that is used in whole or part, such as a cosolvent, to expel a liquid or other material from the same self-pressurized container or from a separate container.

[(b)](4) 'Air [C]conditioning[Equipment].' [Chillers, both centrifugal chillers and positive displacement chillers, intended for comfort cooling of occupied spaces.] Any stationary equipment that cools, heats, or dehumidifies space or water, including, but not limited to, air conditioners, dehumidifiers, water heaters, heat pumps, heat pump chillers, and chillers intended for heating or cooling of occupied spaces. Air conditioning does not include chillers used for ice rinks or other refrigeration subsectors.

(5) 'Applicant.' A person regulated by this Part who applies for a variance under section 494-1.8 of this Part.
Trade groups are not applicants.

(6) 'Authorized representative.' A natural person authorized to represent a business entity or other organization.

(7) 'Automatic leak detection.' A calibrated device using continuous monitoring for detecting leakage of regulated substances that alerts an operator upon detection. Automatic leak detection may either automatically interpret the presence in air of a regulated substance leaked from equipment or automatically interpret measurements (e.g., temperature or pressure) within equipment to indicate a leak of regulated substances.

(8) 'Blend' Any mixture that contains one or more regulated substances.

(9) 'Bulk regulated substances.' Regulated substances of any amount in a container for the transportation or storage of that substance, such as cylinders, drums, ISO tanks, and small cans. A regulated substance that must first be transferred from a container to another container, vessel, or piece of equipment in order to realize its intended use is a bulk substance. A regulated substance contained in a manufactured product such as an appliance, an aerosol can, or a foam is not a bulk substance.

(10) ‘Carbon dioxide equivalent or CO₂e.’ The amount of carbon dioxide by mass that would produce the same global warming impact as a given mass of another greenhouse gas, using GWP₂₀.

[(c) ‘Capital Cost.’ An expense incurred in the production of goods or in rendering services, including but not limited to the cost of engineering, purchase, and installation of components or systems, and instrumentation, and contractor and construction fees.]

[(d)](11) ‘Centrifugal [C]hiller.’ Air conditioning equipment that utilizes a centrifugal compressor in a vapor-compression refrigeration cycle intended for comfort cooling, but not cooling for industrial process cooling [and] or other refrigeration subsectors.

(12) ‘Certified.’ A person or piece of equipment that is designated as meeting standards in accordance with all applicable requirements.

(13) ‘Chiller.’ Equipment that uses a vapor compression or absorption refrigeration cycle to transfer heat from water or another fluid circulating system to air, or another heat exchange media. Chillers can be water-cooled, air-cooled, or evaporatively cooled, and include, but are not limited to, rotary chillers, centrifugal chillers, and positive displacement chillers, including reciprocating, scroll, and screw chillers. Chillers intended for space heating or cooling are considered a type of air conditioning subsector. Chillers used for the refrigeration of food, industrial processes, or ice rinks are a type of refrigeration subsector. Chiller systems in a retail food facility are considered supermarket systems.

[(e)](14) ‘Cold [S]storage [W]arehouse.’ A cooled facility designed to store meat, produce, dairy products, and other retail or commercial food products [that are delivered to other locations for sale to the ultimate consumer].

[(f)](15) ‘Component.’ A part of a [refrigeration] system, including but not limited to condensing units, compressors, condensers, evaporators, and receivers; and all of its connections and subassemblies, without which the [refrigeration] system will not properly function or will be subject to failures.

[(g) ‘Cumulative Replacement.’ The addition of or change in multiple components within a three-year period.]

(16) ‘Data centers.’ A subsector of air conditioning equipment that encompasses products and systems used for large scale cooling or air conditioning of server farms, information technology equipment facilities, computer rooms, data centers, data servers, communication rooms, and other spaces dedicated to maintaining the operating temperature of electronic technologies.

[(h)](17) ‘Department.’ The New York State Department of Environmental Conservation.

(18) ‘Destroy.’ To cause the expiration of a previously produced substance to the destruction efficiency actually achieved. Such destruction does not result in a commercially useful end product.

(19) ‘Direct emissions.’ Greenhouse gas emissions that are the result of activities under the operational control of a person regulated by this Part, such as a manufacturer, owner, or operator.

(20) ‘Disadvantaged community.’ A community that bears a disproportionate burden of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low and moderate-income households, as identified pursuant to section 75–0111 of the Environmental Conservation Law and New York State Department of Environmental Conservation, Disadvantaged Communities Criteria Maps (Version 1.0, 2023), incorporated by reference, per section 494-1.11 of this Part.

(21) ‘Distributor.’ A person to whom a regulated substance is delivered or sold for purposes of export, subsequent sale or delivery in New York State, or any person who imports regulated substances from outside of New York State to distribute and/or sell in New York State, or any person who acts as an agent or broker in buying regulated substances for distribution or sale in New York State. Distributor does not include owners or operators of equipment who sell or transfer recovered substances to another entity for reclaim or destruction or

persons who return products to the seller. Distributors may include wholesale purchasers who intend to resell, deliver, or otherwise supply regulated substances to facilities in New York State.

(22) 'End-of-life loss rate.' The percentage of the refrigerant charge capacity that has the potential to be lost when equipment is disassembled or otherwise disposed, and the integrity of the refrigeration circuit may be reasonably expected to be violated. End-of-life loss rate may be determined using a 10% default rate or using the midpoint of an established range of end-of-life loss rates for the equipment type based on the best available data.

[(i) 'End-use.' Processes or classes of specific applications within industry sectors, including but not limited to those listed in sections 494.4 and 494.5 of this Part.]

(23) 'Equipment or appliance.' Interchangeable terms used in this Part which are any stationary, motor-bearing devices designed to contain and use regulated substances. For a device with multiple independent refrigerant circuits, each circuit is considered a separate and distinct piece of equipment or appliance. For split systems, multiple indoor units may be connected to one circuit, representing one piece of equipment or appliance.

(24) 'Expected life.' The anticipated operational lifespan of the equipment in years, based on manufacturer specifications.

(25) 'Export.' The transport of a product or specified component using a regulated substance from inside New York State to persons outside New York State.

(26) 'Exporter.' Any person who contracts to sell any product or specified component using a regulated substance for export or transfers a product or specified component using a regulated substance to an affiliate outside of New York State.

(27) 'Facility' Any property, plant, building, structure, stationary source, stationary equipment or grouping of stationary equipment or stationary sources located on one or more contiguous or adjacent properties, in actual

physical contact or separated solely by a public roadway or other public right-of way, and under common operational control, that includes one or more pieces of equipment or products in sectors subject to this Part. Operators of military installations may classify such installations as more than a single facility based on distinct and independent functional groupings within contiguous military properties.

(28) ‘Field charged system or Field assembled system.’ Interchangeable terms used in this Part for equipment for which refrigerant is added on-site rather than in a factory. This equipment is considered to be installed on the date upon which the refrigerant circuit is complete, the equipment can function, and the equipment holds a full refrigerant charge such that the equipment is ready for use for its intended purpose.

[(j)](29) ‘Flexible [P]polyurethane.’ A non-rigid polyurethane foam.

[(k)](30) ‘Foam.’ A product with a cellular structure formed via a foaming process in a variety of materials that undergo hardening via a chemical reaction or phase transition. For the purposes of this Part this includes rigid polyurethane appliance foam, commercial refrigeration foam, laminated boardstock, marine flotation foam, sandwich panels, and slabstock; flexible polyurethane; integral skin polyurethane; polystyrene – extruded boardstock, billet, and extruded sheet; phenolic insulation board and bunstock; polyisocyanurate laminated boardstock; polyolefin; and rigid polyurethane spray foam (i.e., high-pressure two-component, low-pressure two-component, and one-component foam sealants).

(31) ‘GWP20.’ An assessment of the Global Warming Potential of greenhouse gases over an integrated twenty-year time frame as published in the Intergovernmental Panel on Climate Change (IPCC) Assessment Report.

(32) ‘Heat pump chiller or Chiller-heater.’ Interchangeable terms used in this Part for chillers designed and installed for the purposes of providing cooling and heating rather than for cooling only.

[(l)](33) 'Household [R]refrigerators and [F]freezers.' Refrigerators, refrigerator-freezers, freezers, and miscellaneous household refrigeration appliances intended for residential use, but does not include household refrigerators and freezers - compact, or household refrigerators and freezers - built-in.

[(m)](34) 'Household [R]refrigerators and [F]freezers - Built-in.' Any refrigerator, refrigerator-freezer or freezer intended for residential use with 7.75 cubic feet or greater total volume and 24 inches or less depth not including doors, handles, and custom front panels; with sides which are not finished and not designed to be visible after installation; and that is designed, intended, and marketed exclusively to be: installed totally encased by cabinetry or panels that are attached during installation; securely fastened to adjacent cabinetry, walls or floor; and equipped with an integral factory-finished face or accept a custom front panel.

[(n)](35) 'Household [R]refrigerators and [F]freezers – Compact.' Any refrigerator, refrigerator-freezer or freezer intended for residential use with a total refrigerated volume of less than 7.75 cubic feet (220 liters).

(36) 'Ice rink.' A facility that provides an area specifically for ice-skating, typically using a chiller. For the purposes of this Part, ice rink equipment is considered to be a type of refrigeration subsector.

(37) 'Import.' The transport of a product or specified component using a regulated substance from outside New York State to persons inside New York State. Imports do not include products or systems in use by a conveyance in trade travelling into New York State including refrigeration, air-conditioning, and heat pump systems in operation aboard ships, planes, motor vehicles, and intermodal containers; products in the possession of a consumer for personal use; or products imported solely for recycling or disposal.

(38) 'Importer.' Any person who imports any product or specified component using or intended for use with a regulated substance into New York State. Importer includes the person primarily liable for the payment of any duties on the merchandise or an authorized agent acting on his or her behalf. The term also includes the consignee; the importer of record; the actual owner; or the transferee, if the right to withdraw merchandise from

a bonded warehouse has been transferred. For the purposes of this Part, importers are regulated as a distributors and suppliers of regulated substances, products, and equipment.

[(o)](39) ‘Integral [S]skin [P]polyurethane.’ A self-skinning polyurethane foam.

(40) ‘Industrial process refrigeration.’ Equipment used in cool process streams at a specific location in manufacturing and other forms of industrial processes and applications. Industrial process refrigeration equipment can be complex, customized systems directly linked to the industrial process and can include packaged or field-charged equipment. Where one appliance is used for both industrial process refrigeration and other applications, it will be considered an industrial process refrigeration system if 50 percent or more of its operating capacity is used for industrial process refrigeration. Chillers used within an industrial process refrigeration system are a separate type of refrigeration subsector.

(41) ‘Industrial process refrigeration chiller.’ A chiller used in industrial process refrigeration. For the purposes of this Part, industrial process refrigeration chillers are a type of refrigeration subsector.

(42) ‘Install.’ To set up products or systems for use, which may include multiple steps. For field-charged systems, installation refers to completing a field-assembled refrigerant circuit, such that the system can function and is ready for use for its intended purpose.

(43) ‘Internal connection.’ Refrigerant piping connections or joints within the internal or indoor unit of a split air-conditioning system, which are typically assembled in the field.

(44) ‘IPCC Assessment Report.’ Table 7.SM.6 from Smith, C., Z.R.J. Nicholls, K. Armour, W. Collins, P. Forster, M. Meinshausen, M.D. Palmer, and M. Watanabe, 2021: The Earth’s Energy Budget, Climate Feedbacks, and Climate Sensitivity Supplementary Material. In Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen,

L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.), pp 16-27.

(45) ‘Leak.’ Any discharge or emission of a regulated substances into the atmosphere including from any piece of equipment, component, cylinder, or other container.

(46) ‘Leak inspection.’ As it relates to a refrigerant-containing appliance, means the examination of an appliance to detect and determine the location of leaks. Potential methods include, but are not limited to, ultrasonic tests, gas-imaging cameras, bubble tests as appropriate, or the use of a leak detection device operated and maintained according to manufacturer guidelines. Methods that determine whether the appliance is leaking but not the location of a leak, such as standing pressure/vacuum decay tests, sight glass checks, viewing receiver levels, pressure checks, and charging charts, must be used in conjunction with methods that can determine the location of a leak.

(47) ‘Leak rate.’ The rate at which regulated substances escape from equipment or containment, expressed in terms of the percentage of the refrigerant charge capacity that would be lost over a 12-month period if the current rate of loss were to continue over that period. The rate must be calculated using one of the following methods.

(i) Potential leak rate as provided in the following table:

<u>Equipment Type</u>	<u>Leak Rate</u>
<u>Packaged air-conditioning or refrigeration equipment</u>	<u>2%</u>
<u>Field-charged air-conditioning equipment</u>	<u>10%</u>
<u>Field-charged refrigeration equipment</u>	<u>20%</u>
<u>Split air-conditioning equipment, two (2) or fewer internal connections</u>	<u>2%</u>
<u>Split air-conditioning equipment, three to nine (3-9) internal connections</u>	<u>6%</u>
<u>Split air-conditioning equipment, 10 or more internal connections</u>	<u>10%</u>

(ii) Rolling average leak rate = (Pounds of refrigerant added to the equipment over the previous 365-day period / pounds of refrigerant the equipment contains at full charge capacity) x 100, expressed as a percentage.

The quantity of refrigerant may also be calculated as the quantity added since the last successful follow-up verification test after all identified leaks in the equipment were repaired if that period is less than one year.

(48) 'Manufacture.' To complete the manufacturing and assembly processes of a substance, product, equipment, or specified component such that it is ready for initial sale, distribution, or operation.

(49) 'Manufacturer or Producer.' Any person that produces, manufactures, formulates, or otherwise creates a bulk regulated substance or a product that contains regulated substances in its final form for distribution or use at or outside of a manufacturing or production facility. This does not include reuse or recycling of a substances or the creation and destruction of intermediate substances in a single process with no storage of the intermediate substances.

[(p)](50) '[Metered Dose Inhaler, or Medical Dose Inhaler, or]MDI.' A metered dose inhaler or medical dose inhaler is a device that delivers a measured amount of medication as a mist that a patient can inhale and consists of a pressurized canister of medication in a case with a mouthpiece.

[(q)](51) 'Miscellaneous [R]residential [R]refrigeration [A]appliance.' A residential refrigeration appliance smaller than a refrigerator, refrigerator-freezer, or freezer, including coolers, cooler compartments, and combination cooler refrigeration or cooler freezer products.

(52) 'Mothballing.' The intentional shutting down of refrigeration or air conditioning equipment for longer than 60 days by the owner or operator of the facility, where the refrigerant has been evacuated from the system or affected component, at least to atmospheric pressure.

[(r)](53) 'Motor-bearing[equipment].' [Equipment c] Containing motorized parts. This includes compressors, condensers, and evaporators.

[(s) 'New.' Products or equipment that are manufactured after the effective date of this Part or installed with new or used components, expanded by the addition of components to increase system capacity after the effective date of this Part, or replaced or cumulatively replaced after the effective date of this Part such that the cumulative capital cost of replacement exceeds 50% of the capital cost of replacing the whole system.]

(54) 'New.' Products or equipment that meet any of the following criteria:

(i) manufactured after the effective date of this Part;

(ii) first installed with new or used components after the effective date of this Part;

(iii) retrofitted after the effective date of this Part;

(iv) expanded by the addition of components to increase system cooling or nominal capacity (british thermal units per hour) after the effective date of this Part;

(v) refrigeration equipment that has been modified such that 75 percent or more of its evaporators and 100 percent of its compressor racks, condensers, and connected evaporator loads (by number) were cumulatively replaced after the effective date of this Part;

(vi) air conditioning equipment with more than one condenser and/or more than one evaporator that is modified such that 75 percent or more of its indoor evaporator units and 100 percent of its air source or water source condensing units (by number) were cumulatively replaced after the effective date of this Part; or

(vii) air conditioning equipment with a single condenser and single evaporator that has a new exterior condenser, condensing unit, or remote condensing unit installed after the effective date of this Part.

(55)'New refrigeration facility.' New construction of a retail or commercial refrigeration facility, cold storage warehouse, industrial process refrigeration facility, or ice rink, or an existing facility not previously used as a retail or commercial refrigeration facility, cold storage warehouse, industrial process refrigeration facility, or ice rink, or an existing facility that has undergone replacement of 75 percent or more of its evaporators and 100 percent of its compressor racks and condensers (by number) after the effective date of this Part.

(56) ‘Operator.’ A person having operational control of a facility which is subject to this Part.

(57) ‘Other residential HVAC.’ Equipment in the air conditioning sector intended for residential use that is not otherwise regulated as a type of chiller, VRF system, or residential and light commercial air conditioning and heat pump, including other types of heat pump equipment used for domestic water heating, pool or spa heating, clothes drying, or dehumidification.

(58) ‘Other commercial HVAC.’ Non-residential equipment in the air conditioning sector that is not otherwise regulated as a type of chiller, VRF system, or residential and light commercial air conditioning and heat pump, including other types of heat pumps used in commercial applications to heat water, clothes drying, or dehumidification.

(59) ‘Owner.’ Any of the following persons:

(i) any holder of any portion of the legal or equitable title of a facility with equipment that is subject to this Part; or

(ii) any holder of a leasehold interest in a facility with equipment that is subject to this Part.

(60) ‘Packaged equipment.’ Equipment for which the refrigerant circuit is assembled and sealed by a manufacturer prior to distribution and sale.

[(t)](61) ‘Person.’ Any individual, firm, association, organization, manufacturer, distributor, partnership, business entity, business trust, public or private corporation, limited liability company, company, state, or local governmental agency or public district, or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

[(u)](62) ‘Phenolic [I]insulation [B]board and [B]bunstock.’ Boards, blocks, or other shapes fabricated with phenolic foam insulation.

[(v)](63) ‘Polyolefin.’ Foam sheets and tubes made of polyolefin.

[(w)](64) ‘Polystyrene [E]extruded [B]boardstock and [B]billet (XPS).’ Polystyrene foam produced on extruding machines in the form of continuous foam slabs which can be cut and shaped into panels.

[(x)](65) ‘Polystyrene [E]extruded [S]sheet.’ Polystyrene foam produced on extruding machines in the form of sheets.

[(y)](66) ‘Positive [D]displacement [C]chiller.’ Vapor compression cycle chillers that use positive displacement compressors, typically used for commercial comfort air conditioning intended for comfort cooling, but not cooling for industrial process cooling and refrigeration.

(67) ‘Potential emission rate.’ An estimate of annual emissions of regulated substances in terms of carbon dioxide equivalent emissions calculated using the following equation: Potential Emission Rate = (GWP20 of the regulated substances x (leak rate x expected life + end-of-life loss rate) x refrigerant charge capacity) / expected life.

(68) ‘Product.’ An item or category of items manufactured from raw or recycled materials which performs a function or task and is functional upon completion of manufacturing. The term includes, but is not limited to: packaged equipment, appliances, foams, fully formulated polyols, self-contained fire suppression devices, aerosols, pressurized dispensers, and wipes.

[(z)](69) ‘Prohibition [D]date.’ The date after which new or retrofit equipment or products, materials, or regulated substances are prohibited or restricted, where applicable.

(70) ‘Reclaim.’ Used (recovered) substances reclaimed by a U.S. EPA-certified refrigerant reclaimer from a previously operational appliance and meets all of the following conditions:

(i) meets all specifications in 40 CFR Part 82, subpart F, appendix A, incorporated by reference, per section 494-1.11 of this Part;

(ii) must have results of the analysis conducted to verify that reclaimed refrigerant meets the necessary specifications as required in subparagraph (i) of this paragraph; and

(iii) if a blend, the component that is a regulated substance contains no greater than fifteen percent (15%) new (virgin) material by weight to meet the specifications as required in subparagraph (i) of this paragraph.

(71) 'Reclaimer.' Any person who accepts regulated substances for the purposes of reclaim and subsequent sale to a new owner.

(72) 'Recover.' The process by which a substance is removed, in any condition, from equipment and stored in an external container, with or without testing or processing the substance.

[(aa)](73) 'Refrigerant[or Refrigerant Gas].' Any substance, including blends and mixtures, that is used [for heat transfer purposes] in a liquid or gaseous state to facilitate heat transfer in a closed system.

(74) 'Refrigerant charge capacity, or full refrigerant charge, or full charge capacity.' Interchangeable terms used in this Part for the amount of refrigerant required in the refrigerant circuit for normal operating characteristics and conditions of the device, appliance, product, or system. This must be calculated using one or a combination of the three methods below. For packaged equipment, this may also be determined using manufacturer's specifications:

(i) use of appropriate calculations based on component sizes, density of refrigerant, volume of piping, seasonal variances, and other relevant considerations;

(ii) use of actual measurements of the amount of refrigerant added to or evacuated from the equipment, including for seasonal variances; and/or

(iii) the midpoint of an established range for refrigerant charge capacity based on the best available data regarding the normal operating characteristics and conditions of the equipment, including refrigerant piping.

[(bb)](75) 'Refrigerated [F]food [P]rocessing and [D]dispensing [E]quipment.' Retail food refrigeration equipment that is designed to process food and beverages dispensed via a nozzle that are intended for immediate or near-immediate consumption, but not water coolers, or units designed solely to cool and dispense water.

[(cc)](76) ‘Refrigeration[Equipment].’ A sector [type of end use] that includes any stationary device that is designed to contain and use refrigerant gas for refrigeration purposes, including but not limited to retail or commercial refrigeration equipment, household refrigeration equipment, [and] cold storage warehouses, industrial process refrigeration, and ice rinks.

(77) ‘Regulated substance.’ Any chemical intended for use in the sectors listed in section 494-1.4 of this Part that has a GWP20 greater than 10, including hydrofluorocarbons, chlorofluorocarbons, hydrochlorofluorocarbons, hydrofluoroolefins, and blends thereof. Regulated substances must be referred to using standard naming conventions such as from the IPCC Assessment Report, the American Society of Heating, Refrigerating and Air-conditioning Engineers, Chemical Abstracts Service, or International Union of Pure and Applied Chemistry. A substance is considered a regulated substance if the GWP20 is unknown, but the substance may be reasonably anticipated to cause or contribute to anthropogenic climate change.

[(dd)](78) ‘Remote [C]condensing [U]units.’ Retail refrigeration equipment or units that consist of compressor(s), condenser(s), and receiver(s) assembled into a single unit, but where the condensing portion is not located in the space or area cooled by the evaporator.

(79) ‘Residential and light commercial air conditioning and heat pumps.’ Equipment for cooling or heating air in individual rooms, single-family homes, and small commercial buildings and includes self-contained or packaged equipment, field assembled, and split air conditioning systems. For the purposes of this Part, this does not include chillers.

[(ee) ‘Residential use.’ Use by a private individual of a substance or product containing the substance, in or around a permanent or temporary household, during recreation, or for any personal use or enjoyment, but does not mean use within a household for commercial purposes.]

(80) ‘Retail food chain.’ A business entity owning or operating 20 or more retail food facilities in New York or that operates more than 100 retail food facilities in the United States, including in New York. Retail food

facilities sell food and food products intended for off-premises consumption and use at least one piece of refrigeration equipment. Retail food facilities include supermarkets, grocery stores, and all other food merchandising stores.

[(ff)](81) ‘Retail [F]food [R]refrigeration or [C]commercial [R]refrigeration.’ Interchangeable terms used in this Part for e[E]quipment designed to store and display chilled or frozen goods for commercial sale including but not limited to stand-alone units, refrigerated food processing and dispensing equipment, remote condensing units, supermarket systems, and vending machines.

(82) ‘Retire.’ The permanent removal from service of equipment, system, or component, rendering it unfit for use by the current or any future owner or operator.

[(gg)](83) ‘Retrofit.’ To convert equipment from one refrigerant to another refrigerant including the conversion of the equipment to achieve system compatibility with the new refrigerant and may include, but is not limited to, changes in lubricants, gaskets, filters, driers, valves, o-rings, or components.

[(hh)](84) ‘Rigid [P]polyurethane and [P]polyisocyanurate [L]laminated [B]boardstock.’ Laminated board insulation made with polyurethane or polyisocyanurate foam.

[(ii)](85) ‘Rigid [P]polyurethane [A]appliance [F]foam.’ Polyurethane foam in domestic appliances used for insulation.

[(jj)](86) ‘Rigid [P]polyurethane [C]commercial [R]refrigeration and [S]sandwich [P]panels.’ Polyurethane foam used to provide insulation in walls and doors of commercial refrigeration equipment.

[(kk)](87) ‘Rigid [P]polyurethane [H]high-pressure [T]two-component [S]spray [F]foam.’ A liquid polyurethane foam system sold as two parts in non-pressurized containers that is field or factory applied using high-pressure proportioning pumps at 800-1600 pounds per square inch and an application gun to mix and dispense the chemical components.

[(ll)](88) ‘Rigid [P]polyurethane [L]low- pressure [T]two-component [S]spray [F]foam.’ A liquid polyurethane foam system sold as two parts in containers that are pressurized to less than 250 pounds per square inch during manufacture of the system for application without pumps and are typically applied in situ relying upon a liquid and/or gaseous blowing agent that also serves as a propellant.

[(mm)](89) ‘Rigid [P]polyurethane [M]marine [F]flotation [F]foam.’ Buoyancy or flotation polyurethane foam used in boat and ship manufacturing for both structural and flotation purposes.

[(nn)](90) ‘Rigid [P]polyurethane [O]one-component [F]foam [S]sealants.’ A polyurethane foam generally packaged in aerosol cans that is applied in situ using a gaseous foam blowing agent that is also the propellant for the aerosol formulation.

[(oo)](91) ‘Rigid [P]polyurethane [S]slabstock and [O]other.’ A rigid closed-cell polyurethane foam formed into slabstock insulation for panels and fabricated shapes for pipes and vessels.

(92) ‘Sector.’ A broad category of applications including but not limited to: refrigeration, air conditioning and heat pumps; foams; aerosols; chemical manufacturing; cleaning solvents; fire suppression and explosion protection; and semiconductor manufacturing.

(93) ‘Small containers of automotive refrigerant.’ A container holding more than two (2) ounces and less than two (2) pounds of any regulated substance used, sold or offered for sale, or designed or intended for use as a heat transfer fluid that provides a cooling effect in a motor vehicle air conditioner.

(94) ‘Solvent.’ Products containing regulated substances intended to dissolve other substances.

(95) ‘Specified component.’ Condensing units, condensers, compressors, evaporator units, and evaporators used in field charged systems in the refrigeration and air-conditioning sectors and subsectors.

(96) ‘Split air-conditioning system.’ Equipment in the air conditioning sector in which regulated substances are carried within field-installed piping between an outdoor unit and at least one indoor unit.

[(pp)](97) ‘Stand-alone [U]unit.’ Retail refrigerators, freezers, and reach-in coolers (either open or with doors) where all refrigeration components are integrated and, the refrigeration circuit may be entirely brazed or welded; equipment systems fully charged with refrigerant at the factory and typically require only an electricity supply to begin operation.

[(qq)](98) ‘Stand-alone [L]low-[T]temperature [U]unit.’ A stand-alone unit that maintains food or beverages at temperatures at or below 32°F (0 °C).

[(rr)](99) ‘Stand-alone [M]medium-[T]temperature [U]unit.’ A stand-alone unit that maintains food or beverages at temperatures above 32°F (0 °C).

(100) ‘Subsector.’ End-uses, processes, classes of applications, or specific uses that are related to one another within a single sector or subsector.

[(ss) ‘Substance.’ Any chemical intended for use in the end-uses listed in section 494.4 of this Part.]

(101) ‘Substitute.’ Any chemical, substance, product substitute, or alternative manufacturing process, whether existing or new, that may be used or is intended for use as a replacement.

(102) ‘System.’ An assemblage of separate components connected to perform a function or task. For field assembled equipment, systems are typically connected and charged in the field with a regulated substance or substitute.

[(tt)](103) ‘Supermarket [S]systems.’ Multiplex or centralized retail food refrigeration equipment systems designed to cool or refrigerate, which typically operate with racks of compressors [installed in a machinery room] and which includes both direct and indirect systems. [For the purposes of this rule, a supermarket system is considered manufactured on the date upon which the refrigerant circuit is complete, the system can function, the system holds a full refrigerant charge, and the system is ready for use for its intended purpose.]

(104) ‘Supplier.’ A producer, manufacturer, or distributor of any applicable substance, product, or equipment.

(105) ‘Transport refrigeration – intermodal containers.’ Refrigerated containers that allow uninterrupted storage during transport on different mobile platforms, including railways, road trucks, and vessels.

(106) ‘Transport refrigeration – marine.’ Refrigeration for perishable goods on refrigerated vessels and various modes of transportation via water, including merchant, naval, fishing, and cruise-shipping.

[(uu)](107) ‘Use.’ Any commercial utilization of a [compound or any] regulated substance in bulk, contained within a product, or otherwise, including but not limited to utilization in a manufacturing process or product in New York State, consumption by the end-user in the State of New York such as in the operation or servicing of equipment, or in intermediate applications in the State of New York, such as formulation or packaging for other subsequent applications. Use may also include deployment, sale, distribution, offer for sale or distribution, discharge, incorporation, transformation, or other manipulation but does not include destruction. [For the purposes of this regulation, use excludes residential use, but does not exclude manufacturing for the purpose of residential use.]

[(vv)](108) ‘Vending [M]achines.’ Self-contained commercial food refrigeration equipment that dispense goods that must be kept cold or frozen.

(109) ‘Very low temperature applications.’ Refrigeration or air conditioning equipment that maintains temperatures below -58 degrees Fahrenheit (-50 degrees Celsius), including but not limited to, medical and laboratory freezers, specialized industrial process cooling applications, and extreme temperature environmental testing.

(110) ‘Virgin.’ A regulated substance that has not had any bona fide use in products or equipment except for those regulated substances contained in the heel or the residue of a container that has had a bona fide use in the servicing, repair, or installation of equipment.

(111) ‘VRF systems, or variable refrigerant flow, or variable refrigerant volume, or VRF, or VRV.’
Interchangeable terms used in this Part for a type of split air-conditioning equipment system incorporating a

single refrigerant circuit that is a common piping network to two or more indoor units each potentially capable of independent control. VRF systems are included in the residential and light commercial air-conditioning and heat pump subsector.

§ 494-1.4 Prohibitions

[No person may sell, supply, offer for sale, install, use, or enter into commerce, in the State of New York, any listed substance for use in any end-use listed in the following table, unless an exemption is provided for in section 494.5 of this Part.]

The following prohibitions apply unless an exemption is provided for in section 494-1.5 of this Part.

(a) 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.

(b) No person may manufacture any product in New York State 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.

(c) Effective one year after the prohibition date, no person may rent, lease, 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.

(d) Where indicated, the prohibited substances are incorporated by reference from section 84.54 of title 40 of the Code of Federal Regulations (CFR), per section 494-1.11 of this Part, and shall have the meaning ascribed to such terms therein except where regulated substance refers to the definition in section 494-1.3 of this Part.

(e) Prohibitions on Products and Systems

[(a) End-Use Category] (1) Sector - Aerosol Products [Propellants]

[End-Use] Subsector	Prohibited Substances	Prohibition Date
1) Aerosol [P]propellants and <u>Solvents</u>	HFC-125, HFC-134a, HFC-227ea and blends of HFC-227ea and HFC-134a	January 1, 2021
	<u>Regulated substances pursuant to requirements in 40 CFR section 84.54(a)(16)(i)</u>	January 1, 2025
	<u>Regulated substances pursuant to requirements in 40 CFR section 84.54(a)(16)(ii)</u>	January 1, 2028
	<u>Regulated substances with a GWP20 greater than 10</u>	January 1, 2034

[(b) End-Use Category] (2) Sector - Air Conditioning

[End-Use] Subsector	Prohibited Substances	Effective Date
1) Centrifugal [C]chillers [(New)]	FOR12A, FOR12B, HFC-134a, HFC-227ea, HFC-236fa, HFC-245fa, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-423A, R-424A, R-434A, R-438A, R-507A, RS-44 (2003 composition), THR-03	January 1, 2024

<p>2) Positive [D]isplacement [C]hillers [(New)]</p>	<p>FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R-125/134a/600a (28.1/70/1.9), R- 125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R- 407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-424A, R-434A, R-437A, R- 438A, R-507A, RS-44 (2003 composition), SP34E, THR-03</p>	<p>January 1, 2024</p>
<p>3) Chillers</p>	<p><u>Regulated substances pursuant to requirements in 40 CFR section 84.54(a)(10)(i) and 40 CFR section 84.54(c)(3)</u></p>	<p><u>January 1, 2025</u></p>
	<p><u>Regulated substances with a GWP20 greater than 10</u></p>	<p>January 1, 2030</p>
<p>4) Heat pump chillers</p>	<p><u>Regulated substances pursuant to requirements in 40 CFR section 84.54(a)(10)(i) and 40 CFR section 84.54(c)(3)</u></p>	<p><u>January 1, 2025</u></p>
	<p><u>Regulated substances with a GWP20 greater than 10</u></p>	<p>January 1, <u>2034</u></p>
<p>5) Residential and light commercial air conditioning and heat pumps</p>	<p><u>Regulated substances pursuant to requirements in 40 CFR section 84.54(a)(1) and 40 CFR section 84.54(c)(1)</u></p>	<p><u>January 1, 2025</u></p>
	<p><u>Virgin substances with a GWP20 greater than 10</u></p>	<p>January 1, <u>2028</u></p>

	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2034</u>
<u>6) VRF systems</u>	<u>Regulated substances pursuant to requirements in 40 CFR section 84.54(c)(2)</u>	<u>January 1, 2026</u>
	<u>Virgin substances with a GWP20 greater than 10</u>	<u>January 1, 2028</u>
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2030</u>
<u>7) Other residential HVAC</u>	<u>Regulated substances with a GWP20 greater than 2690</u>	<u>January 1, 2025</u>
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2027</u>
<u>8) Other commercial HVAC</u>	<u>Regulated substances with a GWP20 greater than 2690</u>	<u>January 1, 2025</u>
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2034</u>
<u>9) Data centers</u>	<u>Regulated substances with a GWP20 greater than 2690</u>	<u>January 1, 2025</u>
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2030</u>

[(c) End-Use Category] (3) Sector - Refrigeration

[End-Use] Subsector	Prohibited Substances	Prohibition Date
(1) Household refrigerators and freezers [(new)]	FOR12A, FOR12B, HFC 134a, KDD6, R 125/290/134a/600a (55.0/1.0/42.5/1.5), R 404A, R 407C, R 407F, R 410A, R 410B, R 417A, R 421A, R 421B, R 422A, R 422B, R 422C, R 422D, R424A, R 426A, R 428A, R 434A, R 437A, R 438A, R 507A, RS24 (2002 formulation), RS 44 (2003 formulation), SP34E, THR-03	January 1, 2022
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2025</u>
(2) Household refrigerators and freezers—compact [(new)]	FOR12A, FOR12B, HFC 134a, KDD6, R 125/290/134a/600a (55.0/1.0/42.5/1.5), R 404A, R 407C, R 407F, R 410A, R 410B, R 417A, R 421A, R 421B, R 422A, R 422B, R 422C, R 422D, R424A, R 426A, R 428A, R 434A, R 437A, R 438A, R 507A, RS24 (2002 formulation), RS 44 (2003 formulation), SP34E, THR-03	January 1, 2021
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2025</u>
(3) Household refrigerators and	FOR12A, FOR12B, HFC 134a, KDD6, R 125/290/134a/600a (55.0/1.0/42.5/1.5), R 404A, R 407C, R 407F, R 410A, R 410B, R 417A, R 421A, R	January 1, 2023

freezers—built in [appliances (new)]	421B, R 422A, R 422B, R 422C, R 422D, R424A, R 426A, R 428A, R 434A, R 437A, R 438A, R 507A, RS24 (2002 formulation), RS 44 (2003 formulation), SP34E, THR-03	
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1,</u> <u>2025</u>
(4) Refrigerated food processing and dispensing equipment [(New)]	HFC-227ea, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R- 407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R- 424A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 formulation)	January 1, 2021
	<u>Regulated substances pursuant to requirements in 40 CFR section 84.54(a)(9) and 40 CFR section 84.54(c)(15)</u>	January 1, 2027
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1,</u> <u>2034</u>
(5) Supermarket [S]ystems [(New)]	HFC-227ea, R-404A, R-407B, R-421B, R-422A, R- 422C, R-422D, R-428A, R-434A, R-507A	January 1, 2021
	<u>Regulated substances with a GWP20 greater than 580 for equipment with refrigerant charge capacity of 50 pounds or greater</u>	<u>January 1,</u> <u>2025</u>

	<u>Regulated substances with a GWP20 greater than 943 for equipment with refrigerant charge capacity of less than 50 pounds</u>	<u>January 1, 2025</u>
	<u>Substances with a GWP20 greater than 10</u>	<u>January 1, 2034</u>
(6) Supermarket [S]ystems (Retrofit)	R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2021
(7) Remote [C]ondensing [U]nits [(New)]	HFC-227ea, R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2021
	<u>Regulated substances with a GWP20 greater than 580 for equipment with refrigerant charge capacity of 50 pounds or greater</u>	<u>January 1, 2025</u>
	<u>Regulated substances with a GWP20 greater than 943 for equipment with refrigerant charge capacity of less than 50 pounds</u>	<u>January 1, 2025</u>
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2034</u>
(8) Remote [C]ondensing [U]nits (Retrofit)	R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2021
(9) Stand-alone [U]nits [M]edium	FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-407C, R-407F, R-410A, R-	January 1, 2021

<p>[T]temperature [(New)]</p>	<p>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, R-507A, RS-24 (2002 formulation), RS-44 (2003 formulation), SP34E, THR-03</p>	
	<p><u>Regulated substances pursuant to requirements in 40 CFR section 84.54(a)(4)</u></p>	<p><u>January 1, 2025</u></p>
	<p><u>Virgin substances with a GWP20 greater than 10</u></p>	<p><u>January 1, 2028</u></p>
	<p><u>Regulated substances with a GWP20 greater than 10</u></p>	<p><u>January 1, 2034</u></p>
<p>(10) Stand-alone [U]units [L]low [T]temperature [(New)]</p>	<p>HFC-227ea, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 formulation)</p>	<p>January 1, 2021</p>
	<p><u>Regulated substances pursuant to requirements in 40 CFR section 84.50(a)(4)</u></p>	<p><u>January 1, 2025</u></p>
	<p><u>Virgin substances with a GWP20 greater than 10</u></p>	<p><u>January 1, 2028</u></p>
	<p><u>Regulated substances with a GWP20 greater than 10</u></p>	<p><u>January 1, 2034</u></p>

(11) Stand-alone [U]nits (Retrofit)	R-404A, R-507A	January 1, 2021
(12) Vending machines [(New)]	FOR12A, FOR12B, HFC-134a, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-426A, R-437A, R-438A, R-507A, RS-24 (2002 formulation), SP34E	January 1, 2021
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1,</u> <u>2025</u>
(13) Vending machines (Retrofit)	R-404a, R-507a	January 1, 2021
(14) Cold [S]torage [W]arehouses [(New)]	HFC-227ea, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-423A, R-424A, R-428A, R-434A, R-438A, R-507A, and RS-44 (2003 composition)	January 1, 2023
	<u>Regulated substances with a GWP20 greater than 580 for equipment with refrigerant charge capacity of 50 pounds or greater</u>	<u>January 1,</u> <u>2025</u>
	<u>Regulated substances with a GWP20 greater than 943 for equipment with refrigerant charge capacity of less than 50 pounds</u>	<u>January 1,</u> <u>2025</u>

	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2034</u>
<u>(15) Ice rinks</u>	<u>Regulated substances with a GWP20 greater than 580</u>	<u>January 1, 2025</u>
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2030</u>
<u>(16) Industrial process refrigeration</u>	<u>Regulated substances with a GWP20 greater than 580 for equipment with refrigerant charge capacity of 50 pounds or greater</u>	<u>January 1, 2025</u>
	<u>Regulated substances with a GWP20 greater than 943 for equipment with refrigerant charge capacity of less than 50 pounds</u>	<u>January 1, 2025</u>
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2034</u>
<u>(17) Industrial process refrigeration chillers</u>	<u>Regulated substances with a GWP20 greater than 1860</u>	<u>January 1, 2025</u>
	<u>Regulated substances with a GWP20 greater than 10</u>	<u>January 1, 2030</u>
<u>(18) New refrigeration facility</u>	<u>Regulated substances with a GWP20 greater than 10 for equipment with refrigerant charge capacity of 50 pounds or greater</u>	<u>January 1, 2025</u>

<u>(19) Transport refrigeration – intermodal containers</u>	<u>Regulated substances pursuant to requirements in 40 CFR section 84.50(a)(6) and 40 CFR section 84.54(c)(7)</u>	<u>January 1, 2025</u>
<u>(20) Transport refrigeration – marine</u>	<u>Regulated substances pursuant to requirements in 40 CFR section 84.54(a)(7) and 40 CFR section 84.54(c)(8)</u>	<u>January 1, 2025</u>
<u>(21) ACIM – self-contained</u>	<u>Regulated substances pursuant to requirements in 40 CFR section 84.50(a)(8)(i)</u>	<u>January 1, 2026</u>
	<u>Regulated substances pursuant to requirements in 40 CFR section 84.50(a)(8)(ii)</u>	<u>January 1, 2027</u>
<u>(22) ACIM - remote</u>	<u>Regulated substances pursuant to requirements in 40 CFR section 84.50(c)(14)</u>	<u>January 1, 2027</u>

[(d) End-Use Category] (4) Sector - Foam

<u>[End-Use] Subsector</u>	<u>Prohibited Substances</u>	<u>Prohibition Date</u>
(1) Rigid [P]polyurethane and [P]polyisocyanurate [L]laminated [B]boardstock	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2021

(2) Flexible [P]polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2021
(3) Integral [S]skin [P]polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(4) Polystyrene [E]extruded [S]sheet	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(5) Phenolic [I]insulation [B]board and [B]bunstock	HFC-143a, HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2021
(6) Rigid [P]polyurethane [S]slabstock and [O]other	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(7) Rigid [P]polyurethane [A]appliance [F]foam	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(8) Rigid [P]polyurethane [C]commercial [R]refrigeration and	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021

[S]sandwich [P]panels		
(9) Polyolefin	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(10) Rigid [P]polyurethane [M]marine [F]flotation [F]foam	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(11) Polystyrene [E]extruded [B]boardstock and [B]billet (XPS)	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel B, Formacel Z-6	January 1, 2021
(12) Rigid polyurethane [(PU)] high-pressure two- component spray foam	HFC-134a, HFC-245fa, and blends thereof; blends of HFC365mfc with at least 4 percent HFC-245fa, and commercial blends of HFC-365mfc with 7 to 13 percent HFC-227ea and the remainder HFC-365mfc; Formacel TI	January 1, 2021
(13) Rigid polyurethane[PU] low-pressure two- component spray foam	HFC-134a, HFC-245fa, and blends thereof; blends of HFC365mfc with at least 4 percent HFC-245fa, and commercial blends of HFC-365mfc with 7 to 13 percent HFC-227ea and the remainder HFC-365mfc; Formacel TI	January 1, 2021

(14) Rigid polyurethane[PU] one-component foam sealants	HFC-134a, HFC-245fa, and blends thereof; blends of HFC365mfc with at least 4 percent HFC-245fa, and commercial blends of HFC-365mfc with 7 to 13 percent HFC-227ea and the remainder HFC-365mfc; Formacel TI	January 1, 2021
(15) All foam products	Regulated substances pursuant to requirements in 40 CFR section 84.54(a)(14)	January 1, 2025
	Regulated substances with a GWP20 greater than 10	January 1, 2030

(f) No person may manufacture, 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 bulk regulated substances as listed in the table below after the prohibition date indicated.

<u>Prohibited Substances</u>	<u>Prohibition Date</u>
<u>Bulk regulated substances with a GWP20 >4600</u>	<u>January 1, 2025</u>
<u>Bulk regulated substances with a GWP20 ≥4200</u>	<u>January 1, 2030</u>
<u>Bulk regulated substances with a GWP20 ≥3000</u>	<u>January 1, 2033</u>
<u>Bulk regulated substances with a GWP20 ≥1600</u>	<u>January 1, 2040</u>
<u>Small containers of automotive refrigerant containing virgin regulated substances</u>	<u>January 1, 2027</u>

§ 494-1.5 Exemptions

The following table lists exemptions to the prohibitions listed in section [494.4] 494-1.4 of this Part.

(a) Table of Acceptable Uses

[End-Use Category] <u>Subsector</u>	[Prohibited] <u>Regulated</u> Substances	Acceptable Uses
(1) Aerosol [P]propellants	HFC-134a	Cleaning products for removal of grease, flux and other soils from electrical equipment; refrigerant flushes; products for sensitivity testing of smoke detectors; lubricants and freeze sprays for electrical equipment or electronics; sprays for aircraft maintenance; sprays containing corrosion preventive compounds used in the maintenance of aircraft, electrical equipment or electronics, or military equipment; pesticides for use near electrical wires, in aircraft, in total release insecticide foggers, or in certified organic use pesticides for which EPA has specifically disallowed all other lower-GWP propellants; mold release agents and mold cleaners; lubricants and cleaners for spinnerettes for synthetic fabrics; duster sprays specifically for removal of dust from photographic negatives, semiconductor chips, specimens under electron microscopes, and energized electrical equipment; adhesives and

		sealants in large canisters; document preservation sprays; FDA-approved MDIs for medical purposes; wound care sprays; topical coolant sprays for pain relief; and products for removing bandage adhesives from skin.
(2) Aerosol [P]ropellants	HFC-227ea and blends of HFC-227ea and HFC-134a	FDA-approved MDIs for medical purposes.
(3) Air [C]onditioning - <u>Chillers</u>	HFC-134a	Military marine vessels where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.
(4) Air [C]onditioning - <u>Chillers</u>	HFC-134a and R-404A	Human-rated spacecraft and related support equipment where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.
(5) Foams – [E]xcept Rigid polyurethane [(PU)] spray foam	All substances in section [494.4] <u>494-1.4(e)</u> of this Part prohibited for the foam [end-use category] <u>subsector</u>	Military applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.

<p>(6) Foams – [E]xcept Rigid polyurethane [(PU)] spray foam</p>	<p>All substances in section [494.4] <u>494- 1.4(e)</u> of this Part prohibited for the foam [end-use category] <u>subsector</u></p>	<p>Space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.</p>
<p>(7) Rigid polyurethane [(PU)] two- component spray foam</p>	<p>All substances in section [494.4] <u>494- 1.4(e)</u> of this Part prohibited for the foam[-end use category] <u>subsector</u></p>	<p>Military or space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.</p>
<p>(8) All [End-Use Categories] <u>Subsectors</u></p>	<p>Any substance prohibited from use in section [494.4] <u>494-1.4(e)</u> of this Part.</p>	<p>[Residential use as defined in section 494.3 of this Part.] <u>Products after a period of ordinary utilization or operation by a consumer; or products within the disposal or recycling chain.</u></p>
<p><u>9) Foam Sector</u></p>	<p><u>Any substance prohibited from use in section 494- 1.4(e)(4) of this Part.</u></p>	<p><u>Space and military applications until January 1, 2026</u></p>
<p><u>(10) All Sectors</u></p>	<p><u>Any substance prohibited from use</u></p>	<p><u>Very low temperature applications</u></p>

	<u>in section [494.4]</u> <u>494-1.4(e) of this</u> <u>Part.</u>	
<u>(11) All Sectors</u>	<u>Any substance</u> <u>prohibited in section</u> <u>[494.4] 494-1.4(e) of</u> <u>this Part.</u>	<u>Systems retrofitted to use a lower GWP20</u> <u>substitute, until January 1, 2029.</u>

§ 494-1.6 [Administrative Requirements] Labeling and Disclosure Requirements

(a) As of January 1, 2025 [A]any person who manufactures for sale or entry into commerce in the State of New York new motor-bearing equipment, specified components, or new foam products in the[end-uses] subsectors listed [and after the applicable prohibition dates] in section [494.4]494-1.4 of this Part, must provide:

(1) A written disclosure [statement] provided to the buyer as part of the sales transaction and invoice.

(2) A written disclosure provided to the public on a public website or in a specification or safety data sheet that is available on the manufacturer’s website.

(3) A label on the equipment, product, or its packaging or in a format that can be displayed at all times in a conspicuous location at a facility that meets the requirements of 40 CFR 84.58(d).

(b) The written disclosures and label must identify all regulated substances contained in the equipment or product, indicate if the regulated substance was of reclaim in origin, and provide the date of manufacture or a four-digit year. For specified components that do not contain regulated substances, the written disclosure or label must identify all regulated substances intended for use with that component.

(c) For field-charged equipment or systems containing 50 or more pounds of regulated substances, the manufacturer shall ensure that the label is affixed to the equipment or located in the facility such that the

information can be easily produced by the owner/operator of the equipment upon request, and that the label includes:

- (1) any regulated substances currently contained in the equipment;
- (2) the date on which the refrigerant circuit was completed or four-digit year; and
- (3) the refrigerant charge capacity.

[(b)](d) The written disclosures [statement or] and label may be combined with such statements, labels, or other requirements of [required by] other jurisdictions.

[(c)](e) The written disclosures [statement or] must state that the motor-bearing refrigeration equipment or foam product may only be used in the State of New York with substances that are in compliance with New York State regulations.

[(d)](f) If [not combined with a] the written disclosure [statement] to the buyer is not combined with a disclosure required by another jurisdiction, the written disclosure shall include the following statement signed by an authorized representative of the manufacturer: “I certify under penalty of law that the statements and information submitted in this document are to the best of my knowledge and belief true, accurate, and complete.”

(g) Any product or system, using a regulated substance manufactured, imported, or installed after the relevant prohibition date for that sector or subsector, that lacks a label will be presumed to use a regulated substance that is not in compliance with this Part unless the presumption is rebutted. A person may rebut the presumption by demonstrating that the product or system uses a substance in compliance with this Part.

Section 494.7 is repealed. A new section 494-1.7 is added.

§ 494-1.7 Requirements for Suppliers of Regulated Substances, Suppliers of Regulated Substances Contained in Pre-Charged Equipment or Products, and Reclaimers

(a) General Registration. On or before January 1, 2025, any person who supplies, manufactures, produces, or distributes bulk regulated substances or equipment or products containing regulated substances intended for sale or use in New York State or who reclaims regulated substances collected in New York State must register with the department in a manner determined by the department. Any person who begins conducting business by supplying, manufacturing, producing, or distributing bulk regulated substances or equipment or products containing regulated substances intended for sale or use in New York State or by reclaiming regulated substances collected in New York State after January 1, 2025, must register with the department no later than 30 days after the start of their business operations. Such registration must include the following:

- (1) Business name, mailing address, including address, city, state, and zip code.
- (2) Name, title, phone number, and email address of an authorized representative.
- (3) Name and mailing address for each manufacturing, distribution, wholesale, destruction, or reclaim facility under the operational control of the person or business registered under this subdivision.

(b) Manufacturer Registration. In addition to the information required per (a), any person who manufactures for sale or entry into commerce in the State of New York new motor-bearing equipment or new foam product in the sectors listed in section 494-1.4 of this Part that contain a regulated substance must also provide the following information as part of their registration:

- (1) A list of all products and equipment listed in section 494-1.4 of this Part that are intended to contain regulated substances and are applicable to the manufacturer.
- (2) A list of regulated substances that are being used or are intended to be used with products or equipment within each applicable subsector identified in paragraph (1) of this subdivision.
- (3) Information as to the written disclosures and labels to be issued per section 494-1.6 of this Part.
- (4) Certification by the authorized representative for the manufacturer which includes the statement, "I certify under penalty of law that the statements and information submitted in this document are to the best of

my knowledge and belief true, accurate, and complete and I acknowledge the regulatory requirements of 6 NYCRR Part 494.”

(c) Annual Reporting. Beginning in calendar year 2026, each supplier and reclaimer indicated in subdivision (a) of this section must submit an annual report to the department on March 31 for the previous year in a manner determined by the department. The information provided must be reviewed against the records required under subdivisions (d) and (e) of this section to ensure accurate transcription of chemical names, quantities, and units. The report must include the following, where applicable:

(1) Total quantity in mass of regulated substances supplied to New York State in the calendar year. For substances contained within pre-charged equipment or products, the quantities shall be estimated pursuant to 40 CFR section 98.433(a), where imported refers to units supplied to New York State. For reclaimed substances, the information provided should also include the percentage composition of virgin substances. The quantity reported shall include the following information:

(i) Total statewide annual aggregated weight in pounds of each type of regulated substance purchased or received for subsequent resale or delivery in New York State for any purpose other than reclamation or destruction.

(ii) Total statewide annual aggregated weight in pounds of each type of regulated substance sold, supplied, or distributed to a facility in New York State.

(2) Total quantity in mass of regulated substances collected in New York State that were reclaimed or destroyed in the calendar year, including the following:

(i) Total statewide annual aggregated weight in pounds of each type of regulated substance collected in New York State that was reclaimed or supplied to another person for purposes of reclamation.

(ii) Total statewide annual aggregated weight in pounds of each type of regulated substance collected in New York State that was destroyed or supplied to another person for purposes of destruction in the calendar year.

(d) General Record Keeping. As of the effective date of this regulation, suppliers and reclaimers indicated in subdivision (a) of this section must maintain for five years and make available within 90 days upon request by the department a copy of the following information, where applicable.

(1) Invoices of all regulated substances distributed or received in New York State through sale or transfer, indicating business names, business addresses, the date of sale or transfer, the quantity of each type of regulated substance sold or transferred, and the name and email address of an authorized representative for the supplier and recipient.

(2) A list of all known suppliers, purchasers, or other recipients for the previous five years, including business names, business address, and the name and email address of an authorized representative for each business.

(3) Facility information, including the mailing address and the name, title, and email address for an authorized representative for each manufacturing, distribution, wholesale, destruction, or reclaim facility under the operational control of the person or business registered under subdivision (a) of this section.

(4) Any other records used to determine or that can verify the quantities reported under subdivision (c) of this section.

(e) Manufacturer Record-Keeping. In addition to the information required per subdivision (a) of this section, any person who manufactures for sale or entry into commerce in the State of New York new motor-bearing equipment or new foam product in the sectors listed in section 494-1.4 of this Part that contain a regulated substance must make available within 90 days upon request by the department a record of transactions for the previous five years that contains the following information for each unit sold or otherwise entered into commerce in New York State:

(1) Name, address, telephone number, and email address of the person purchasing the equipment or foam product, where provided to the manufacturer.

(2) The type of equipment or foam product subsector.

(3) Model and serial number of the equipment or foam product, where applicable. When the affected equipment is part of an assembly without an individual serial number, the serial number of each component must be recorded. If a component or equipment does not have an individual serial number or the serial number is inaccessible after assembly, the physical description must be recorded in enough detail for positive identification.

(4) Date of manufacture of the equipment or foam product.

(5) Date of sale of the equipment or foam product.

(6) The regulated substances that are intended to be used with the equipment or foam product.

(7) The full charge capacity of the equipment or container, where applicable.

(8) A copy of the written disclosures and label issued per Part 494-1.6 of this Part.

(9) For equipment subject to the prohibitions in sections 494-1.4(b)(5) and (6) and sections 494-1.4(c)(9) and (10) of this Part, a copy of a certification or other documentation from a certified reclaimer that the regulated substances were reclaimed and, if a reclaimed blended refrigerant, that the component of the blend that is a regulated substance contained no greater than fifteen percent virgin substances by weight.

Section 494.8 is renumbered 494-1.9. A new section 494-1.8 is added.

§ 494-1.8 Variances

(a) Applicability. An Applicant may submit a request to the department for a variance from the requirements of sections 494-1.4, 494-2.4, 494-2.5, and 494-2.8. of this Part. The department, in its discretion, may grant a variance if the department determines that the Applicant has proven by clear and convincing evidence that the criteria for a variance in subdivision (b) of this section has been met and that the Applicant has complied with all application requirements specified in subdivision (c) of this section.

(b) Variance Types. The department may issue one of the following variances:

(1) Impossibility. The Applicant cannot comply with the regulatory requirements, and the Applicant can demonstrate all three (3) of the following criteria:

(i) a compliant substance is not currently or potentially available or a component needed for repair is not currently or potentially available;

(ii) a variance will not increase the overall risk to human health or the environment; and

(iii) the Applicant has used best efforts to anticipate and address the impossibility and any potential noncompliance, including minimizing any adverse effects of the greenhouse gas emissions related to noncompliance or making all efforts to repair all identified leaks and to operate and maintain equipment in accordance with manufacturer recommendations, where applicable.

(2) Force Majeure Event. The Applicant cannot comply with the regulatory requirements, and the Applicant can demonstrate the two (2) following criteria:

(i) noncompliance is due to a Force Majeure Event; and

(ii) the Applicant has used best efforts to anticipate and address any Force Majeure Event and any potential noncompliance, including minimizing any adverse effects of the greenhouse gas emissions related to noncompliance or making all efforts to repair all identified leaks and to operate and maintain equipment in accordance with manufacturer recommendations, where applicable.

(3) Economic Hardship. The Applicant cannot comply with the regulatory requirements, and the Applicant can demonstrate the two (2) following criteria:

(i) The regulated equipment or facility is located in a Disadvantaged Community and is either a retail food facility or meets the definition of small business as defined in section 131 of the Economic Development Law. .

(ii) Compliance would result in closure of the entire facility or a large portion of the facility, or a substantial loss of revenue from the facility.

(c) Application for Variance. To apply for a variance the Applicant shall submit an Application that includes the following:

(1) Applicant name, business entity name, ownership status (e.g., parent, subsidiary), address, telephone number, and email address.

(2) Description of business activity or product description.

(3) Relationship to the product.

(4) The specific section(s) of this Part from which a variance is being requested.

(5) Explanation and description of the reasons for seeking a variance.

(6) Identification of whether the variance requested is pursuant to paragraphs 494-1.8(b)(1) or (2) or (3) of this section, clear and convincing evidence demonstrating how the variance criteria specified in subdivision 494-1.8(b) has been met and supporting documentation for attributing noncompliance to the type of variance requested.

(7) Description of all efforts made to timely fulfill the requirements of the section(s) from which a variance is being requested.

(8) Length of variance requested as well as the earliest date when compliance will be achieved.

(9) A compliance plan that describes in detail how, if a variance is granted, compliance will be achieved as expeditiously as possible, including all of the following:

(i) The method by which compliance will be achieved.

(ii) Milestone achievements and dates.

(iii) For variance requests based on impossibility, quantification of GHG emissions resulting from normal business-as-usual operations as it directly relates to the continued use of any regulated substance in sectors listed in section 494-1.4 of this Part. This includes quantification of the direct emissions of regulated substances resulting from the manufacture, use, and disposal of equipment and products in New York State with all

calculations, based on the average lifetime of the equipment or product that will continue to use prohibited substances. Applicant must include all calculations used to calculate GHG emissions estimates, including emission factors (e.g., refrigerant charge capacity and leak rate as defined in section 494-1.3 of this Part, and regulated substances used over the average lifetime of the equipment, system, or product).

(iv) Description of any negative impacts to human health or the environment that may result from the granting of a variance.

(v) A mitigation plan that demonstrates how the Applicant will reduce excess emissions of regulated substances to a level equal to or below what would have been emitted had the Applicant complied and how the Applicant will mitigate any negative impacts to human health or the environment. For variance requests based on impossibility, the Applicant must include all calculations used to calculate emissions estimates, including emission factors. These calculations may include refrigerant charge capacity and leak rate as defined in section 494-1.3 of this Part and regulated substances used over the average lifetime of the equipment, system, or product. The mitigation plan may include actions such as to minimize usage of regulated substances, efforts to reduce leaks or venting of regulated substances, or actions to recycle or destroy high-GWP refrigerant(s).

(vi) A detailed explanation of efforts that may be implemented to curtail noncompliance in lieu of obtaining a variance.

(10) The Applicant shall certify under penalty of perjury that they are a responsible official with authority to submit the application, implement any provision of an approved variance, and that all information provided is true and accurate to the best of the Applicant's knowledge, after conducting due diligence. Applications without this certification will be automatically denied.

(11) All applications and documentation relating to the variance shall be submitted electronically.

(12) Applications and supporting documents shall be written in English.

(13) Submission of records containing trade secrets, confidential commercial information, or critical infrastructure information will be handled pursuant to section 616.7 of this Title.

(d) Approval and Disapproval Process.

(1) The department will determine whether the application is complete and will notify the Applicant of this determination within 30 days of receipt of an application. If the application is determined to be incomplete, the department will notify the Applicant and specify the information needed to make the application complete. To be complete, the application must include all information required by subdivisions (b) and (c) of this section. Any application not providing all required information within 90 calendar days is automatically denied.

(2) After a determination of completeness under paragraph (1) of this subdivision, for variance requests based on impossibility or force majeure, the department may publicly post notice of receipt of the application and the requested variance and invite public comment for 30 calendar days from the date the notice is posted.

(i) Public comments that are received within 30 calendar days of the date of notice shall be considered by the department in making the final decision on the application. The Applicant may submit additional supporting documentation before a decision has been reached.

(ii) The department will determine if the variance application is approved or disapproved within 60 calendar days after close of the public comment period, if held.

(3) The department will notify the Applicant of the decision in writing. In granting any variance under this section, the department may impose specific conditions necessary to assure that the subject activity will have no significant adverse impact on public health, safety, or welfare, the environment, or natural resources. If approved, the department will specify all terms and conditions of the variance in the form of an approved variance.

(4) An approved variance, including the terms and conditions of the approved variance, are granted solely to the Applicant of the variance and are non-transferrable.

(5) The variance shall not be retroactively applied to any date before the Applicant submits a complete application.

(6) The department may expeditiously approve a variance application for a Force Majeure Event meeting the criteria specified in paragraph 494-1.8(b)(2) of this section prior to the close of a public comment period if the department determines that the urgency of the Force Majeure Event necessitates an immediate variance to protect human health or the environment.

(e) Failure to Comply with Terms or Conditions of the approved variance.

(1) The Applicant shall comply with all terms of the approved variance.

(2) The variance shall cease to be effective immediately upon the failure of the Applicant, to whom the variance was granted, to comply with any term or condition of the approved variance.

(3) section 494-1.10 of this Part shall apply to violations of any variance condition.

(f) Revocation or Modification of Variance.

(1) The department may modify or revoke any variance approval based on the discovery of any of the following:

(i) materially false or inaccurate statements in the variance application or supporting information;

(ii) failure by the Applicant to comply with any terms or conditions of the variance approval;

(iii) exceeding the scope of the project as described in the variance application;

(iv) material information or a material change in environmental conditions, relevant technology or applicable law since the granting of the variance. This includes if the department determines that the Applicant no longer meets the variance criteria specified in subdivision (b) of this section; or

(v) noncompliance with previously approved variance conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the department, related to the subject of the variance.

§ [494.8] 494-1.9 Severability.

Each provision of this Part shall be deemed severable, and in the event that any provision of this Part is held to be invalid, the remainder of this Part shall continue in full force and effect.

A new section 494-1.10 is added to read as follows:

§ 494-1.10 Enforcement.

(a) Any person who violates any provision of or who fails to perform any duty imposed by this Part shall be liable for all applicable penalties or sanctions set forth in article 71 of the Environmental Conservation Law.

A new section 494-1.11 is s added to read as follows:

§ 494-1.11 Reference Material

This Part contains references to documents for information as to the standards to be met or guidelines and methodology to be used in meeting specific requirements. The availability of such documents is noted below, which correlates specific references in CFR (Code of Federal Regulations) or other sources. In addition, copies of referenced material are available for public inspection and copying at the Office of Climate Change in the Albany office of the Department of Environmental Conservation, or at the Albany office of the New York State Department of State.

Reference Material	Availability
40 CFR 82, Subpart F, Appendix A (Effective November 18, 2016)	494-1.11(a)
40 CFR 84.58(Effective December 26, 2023)	494-1.11(a)
40 CFR 98.433 (Effective November 29, 2013)	494-1.11(a)

IPCC Assessment Report	494-1.11(b)
Disadvantaged Communities	494-1.11(c)

(a) Any volume of the Code of Federal Regulations (CFR) may also be obtained from the National Archives and Records Administration, <https://www.archives.gov/federal-register/cfr> or <https://www.ecfr.gov/>.

(b) Any report by the Intergovernmental Panel on Climate Change can also be obtained from the IPCC Secretariat, <https://www.ipcc.ch/>.

(c) The 2023 Disadvantaged Communities criteria and map can be obtained from the Department of Environmental Conservation, 625 Broadway, Albany, NY.

A new Subpart 494-2 is added to read as follows:

Subpart 494-2 Refrigerant Management and Replacement Program

§ 494-2.1 Applicability

(a) The requirements of this Subpart apply to any owner or operator of stationary refrigeration or air conditioning equipment with a refrigerant charge capacity greater than or equal to 50 (fifty) pounds of a regulated substance or a comparable potential emission rate.

(b) This Subpart also applies to retail food chains owning or operating 20 or more retail food facilities in New York or that operate more than 100 retail food facilities in the United States, including in New York State.

§ 494-2.2 Registration and Labeling

(a) Any owner or operator of refrigeration or air conditioning equipment containing regulated substances in the subsectors listed in section 494-1.4 of this Part that exceeds the compliance threshold indicated in the following table must register with the department by completing the registration and labeling actions by the compliance date specified.

Equipment Size	Regulated Equipment Compliance Threshold	Registration and Labeling Compliance Date
Large	Refrigerant charge capacity of 1,500 pounds or greater	June 1, 2025 for equipment installed prior to that date; Otherwise, by June 1 of the calendar year after the date that new equipment is installed.
	Split air-conditioning system with potential emission rate of 23,000 pounds CO ₂ e or greater per year	
Medium	Refrigerant charge capacity of 200 to 1,499 pounds	June 1, 2026 for equipment installed prior to that date; By June 1 of the calendar year after the date that new equipment is installed.
	Split air-conditioning system with potential emission rate of 3000 to 22,999 pounds CO ₂ e per year	
Small	Refrigerant charge capacity of 50 to 199 pounds	June 1, 2028 for equipment installed prior to that date; By June 1 of the calendar year after the date that new equipment is installed.
	Split air-conditioning system with potential emission rate of 750 to 2999 pounds CO ₂ e per year	

(b) On or before the compliance date indicated in subdivision (a) of this section, owners or operators of the regulated equipment outlined in subdivision (a) of this section must register and provide the following information to the department in a manner determined by the department.

(1) Facility information:

(i) Name of owner and operator.

(ii) Federal tax identification number (employer identification number).

(iii) Facility North American Industry Classification System (NAICS) code.

(iv) Name of facility, including a store identifier such as store number.

(v) Facility mailing address including a street address, city, state, and zip code.

(vi) Facility physical address including street address, city, state, and zip code.

(vii) Facility contact person, title, phone number, and email address.

(viii) If a new owner per subdivision (d) of this section, the date that the person named in subparagraph (i) of this paragraph became the owner of the facility.

(2) Refrigeration or air conditioning equipment information:

(i) Identification number. The identification number may be assigned by the equipment owner or operator.

(ii) Type. The system type information must include whether it is a refrigeration or air conditioning equipment and the specific subsector per section 494-1.4 of this Part.

(iii) Equipment manufacturer name.

(iv) Equipment model, model year, and the four-digit year that the refrigerant circuit was completed if field-charged.

(v) Equipment serial number. If the equipment is part of an assembly without a serial number or the serial number is not accessible after assembly, the physical location of the equipment must be provided.

(vi) Temperature classification. Refrigeration equipment must be identified as a low-temperature, medium-temperature, or other.

(vii) Full refrigerant charge capacity that the equipment is designed for to maintain normal operating characteristics.

(viii) Information on automatic leak detection devices or systems installed.

(ix) Number of specified components by type.

(x) Regulated substance(s) used.

(xi) A copy of the label produced per subdivision c of this section.

(c) On or before the compliance date indicated in subdivision (a) of this section, owners or operators of the regulated equipment must ensure that a label is affixed to the equipment or conspicuously located in the facility such that the information can be easily produced upon request. The label must include the following information:

(1) Any regulated substances currently contained in the equipment as a refrigerant.

(2) The four-digit year on which the equipment was manufactured or, if field-charged, when the refrigerant circuit was completed.

(3) The refrigerant charge capacity.

(d) New owners. If there is a change of ownership of a facility that has been registered in accordance with this section, the new owner or operator must re-register with the department by June 1 of the calendar year after which the change of ownership has occurred and provide the information outlined in subdivisions (a) and (b) of this section.

§ 494-2.3 Leak Detection and Monitoring

(a) Starting January 1, 2025, any owner or operator of refrigeration or air conditioning equipment in the subsectors listed in section 494-1.4 of this Part that exceeds the compliance threshold indicated in the following table and is operated year-round, must conduct the following leak management protocols in accordance with the frequency specified.

Equipment Size	Regulated Equipment Compliance Threshold	Leak Detection Protocol
Large – Refrigeration Equipment	Refrigerant charge capacity of 1,500 pounds or greater	Monthly leak inspection, to be replaced with an automatic leak detection system on or before June 1, 2025.
Large – Air-Conditioning Equipment	Refrigerant charge capacity of 1,500 pounds or greater	Monthly leak inspection or install an automatic leak detection system.
	Split air-conditioning system with potential emission rate of 23,000 pounds CO ₂ e or greater per year	
Medium	Refrigerant charge capacity of 200 to 1,499 pounds	Quarterly leak inspection or install an automatic leak detection system.
	Split air-conditioning system with potential emission rate of 3,000 to 22,999 pounds CO ₂ e per year	
Small	Refrigerant charge capacity of 50 to 199 pounds	Annual leak inspection or install an automatic leak detection system.

	Split air-conditioning system with potential emission rate of 750 to 2,999 pounds CO ₂ e per year	
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(b) Leak inspections must be conducted by the owner or operator of the regulated equipment outlined in subdivision (a) of this section using a calibrated leak detection device or bubble test at the following intervals and under these conditions:

- (1) at the frequency outlined in subdivision (a) of this section;
- (2) when adding additional regulated substance amounts equal to or greater than five (5) pounds or one (1) percent of the refrigerant charge capacity of the regulated equipment; and
- (3) when oily residue is observed on any refrigerant circuit indicating a refrigerant leak.

(c) Leak detection devices must be calibrated to accurately detect and measure the ambient concentration of regulated substances at a minimum concentration level of 10 parts per million of vapor of the specific regulated substance(s) used in the regulated equipment. Additionally, all visible and accessible components of a refrigerant-containing appliance must be inspected, with the following exceptions:

- (i) where components are insulated, under ice that forms on the outside of equipment, underground, behind walls, or are otherwise inaccessible;
- (ii) where personnel must be elevated more than two meters above a support surface; or
- (iii) where components are unsafe to inspect, as determined by site personnel.

(d) Monthly, quarterly, and annual leak inspections are not required for regulated equipment or portions of regulated equipment continuously monitored by an automatic leak detection system that meets the following requirements. Automatic leak detection systems required by subdivision (a) of this section must be installed by owners or operators to meet the following requirements.

(1) For automatic leak detection systems that detect the presence of a regulated substance in the air, the system must be annually audited and calibrated using the manufacturer-recommended procedures so that it accurately detects a concentration level of 10 parts per million of vapor of the specific regulated substance(s) used in the regulated equipment and alerts the operator when a concentration of 100 parts per million of vapor of the regulated substance(s) is reached. The sensors or intakes shall be placed so that they will continuously monitor the refrigerant concentrations in air in proximity to the compressor, evaporator, condenser, and other areas with a high potential for a refrigerant leak.

(2) For an automatic leak detection system that interprets measurements to indicate a leak, the automatic leak detection system must be annually audited and calibrated using manufacturer recommended procedures so that it will alert the owner or operator when measurements indicate a loss of 50 pounds of refrigerant or 10 percent of the equipment's full refrigerant charge capacity, whichever is less.

(3) If an automatic leak detection system detects a leak, the owner or operator must perform a leak inspection on the system within 24 hours of the leak detection. The leak inspection must be conducted using a calibrated leak detection device or a bubble test to confirm a refrigerant leak and determine the location.

(4) When an automatic leak detection system is only being used to monitor portions of a regulated equipment system, the remainder of the equipment continues to be subject to any applicable leak inspection requirements.

(5) Where an automatic leak detection system is required per subdivision (a) of this section, the entirety of the regulated equipment system must be monitored by an automatic leak detection system.

(e) For regulated equipment listed in subdivision (a) of this section that is not operated year-round, the owner or operator must conduct a leak inspection within 30 days after starting each operation, and once every three months thereafter until the regulated equipment is shut down. The leak inspection must be conducted using a calibrated leak detection device or bubble test.

(f) The requirements of this section do not apply during the time that regulated equipment is undergoing mothballing. The requirements of this section apply on the day the regulated equipment resumes operation after mothballing.

§ 494-2.4 Leak Repair Requirements

(a) Beginning January 1, 2025, the owner or operator of a refrigeration or air conditioning equipment that exceeds a compliance threshold indicated in section 494-2.3 of this Part must ensure that all detected leaks are repaired according to this section and must maintain and report information in accordance with sections 494-2.6 and 494-2.7 of this Part.

(b) 14-day requirement. A leak must be repaired by a certified technician within 14 days of its detection, except when a longer time period is allowed under subdivisions (c) or (d) of this section.

(c) 45-day allowance. The time period for repair of an identified leak is up to 45 days if one or more of the following conditions apply:

(1) A certified technician is not available to complete the repair or replace the component(s). A written record must be kept in accordance with section 494-2.7 of this Part that no certified technician was reasonably available within 14 days of the initial leak detection.

(2) The parts necessary to repair a leak are unavailable. A written record must be kept in accordance with section 494-2.7 of this Part that the necessary parts were unavailable within 14 days of the initial leak detection. The written record must include a written statement from the manufacturer.

(3) The leak repair requires an industrial process shutdown that results in an industrial process temporarily ceasing to manufacture the desired product.

(d) 120-day allowance. The time period for a repair of an identified leak is up to 120 days if all of the following conditions apply:

(1) The equipment is used for industrial process refrigeration.

(2) The leak requires an industrial process shutdown that results in ceasing to manufacture the desired product.

(3) Written records that document that required conditions are met must be maintained in accordance with section 494-2.7 of this Part.

(e) Initial verification test. An initial verification test must be conducted as soon as practicable and at least 30 days after completion of refrigerant leak repairs or 120 days for industrial process refrigeration. If a refrigeration or air conditioning equipment is evacuated during a refrigerant leak repair, the initial verification test must be conducted prior to the replacement of the full charge and before the equipment has reached operation at normal characteristics and conditions.

(f) Follow up verification test. A follow up verification test must be conducted within 10 days of the equipment reaching normal operating conditions. If a refrigeration or air conditioning equipment is evacuated during a refrigerant leak repair, a follow up verification test must be conducted within 14 days of the equipment reaching normal operating conditions.

(g) Leak repair requirements after an unsuccessful verification test. If an initial or follow up verification test indicates that a leak is still occurring after a repair attempt and there is not an approved variance in place under section 494-1.8 of this Part, the owner or operator must do one of the following:

(1) Ensure that the leak is repaired through a subsequent repair attempt(s) within a second timeframe that equals the same number of days allowed under subdivisions (b) through (d) of this section.

(2) Prepare a retrofit or retirement plan in accordance with section 494-2.5 of this Part.

(h) Leak repair requirements during equipment mothballing. The requirements of this section do not apply during the time that a refrigeration or air conditioning equipment is undergoing mothballing. The requirements of this section apply on the day the equipment resumes operation after mothballing.

§ 494-2.5 Retrofit or Replacement Plans for Leaking Equipment

(a) Beginning January 1, 2025, the owner or operator of an air conditioning or refrigeration equipment with a refrigerant leak that has not been successfully repaired within the time required for refrigerant leak repair under subdivisions (b), (c), or (d) of section 494-2.4 of this Part and does not have an approved variance under section 494-1.8 of this Part must prepare and implement a retrofit or retirement plan as provided in subdivision (g) of section 494-2.4 of this Part.

(1) The plan must establish a schedule to retrofit or retire leaking equipment no later than six months after the initial detection of the refrigerant leak, and all work must be completed during this six-month period.

(2) The plan must be kept at the facility with the leaking stationary refrigeration or air conditioning equipment in accordance with section 494-2.7 of this Part.

(3) The plan must address the retrofitted equipment, or the new equipment if existing equipment is being replaced, and include the following:

- (i) equipment identification number as it appears in the registration completed per 494-2.2 of this Part;
- (ii) equipment type;
- (iii) equipment manufacturer;
- (iv) equipment model or description;
- (v) temperature classification identified as a low, medium, or other temperature equipment;
- (vi) full refrigerant charge capacity of the equipment;
- (vii) regulated substance to be used;
- (viii) a timetable that includes the expected beginning date and completion date for the installation, construction, or retrofit; and
- (ix) a signature by a representative of the facility and date signed.

(b) Retrofit or retirement plans during equipment mothballing. The requirements of this section do not apply during the time that a refrigeration or air conditioning equipment is undergoing mothballing. The requirements of this section apply on the day the equipment resumes operation after mothballing.

(c) Retrofit or Retirement Plan Requirements Variance. If the owner or operator of the equipment has received a variance pursuant to section 494-1.8 of this Part, the preparation and implementation of a retrofit or retirement plan is not required during the time period the variance is in effect. If the owner or operator of the equipment has submitted a request for a variance pursuant to section 494-1.8 of this Part, the preparation and implementation of a retrofit or retirement plan is not required until a final variance determination is made by the department. A written record(s) must be kept to document that the owner or the operator has requested or received a variance.

§ 494-2.6 Annual Reporting Requirements

(a) Any owner or operator of refrigeration or air conditioning equipment in the subsectors listed in Part 494-1.4 of this Part that exceeds the compliance threshold indicated in the following table must submit an annual facility stationary refrigeration or air conditioning report (annual report) in a manner determined by the department each year starting with the deadline specified in the following table and then annually thereafter.

Equipment Size	Regulated Equipment Compliance Threshold	Annual Report Deadline
Large	Refrigerant charge capacity of 1,500 pounds or greater	March 31, 2026 for regulated equipment installed prior to January

	Split air-conditioning system with potential emission rate of 23,000 pounds CO ₂ e or greater per year	1, 2025; By March 31 of the calendar year after the date that new regulated equipment is installed.
Medium	Refrigerant charge capacity of 200 to 1,499 pounds	March 31, 2027 for regulated equipment installed prior to January
	Split air-conditioning system with potential emission rate of 3000 to 22,999 pounds CO ₂ e per year	1, 2027; By March 31 of the calendar year after the date that new regulated equipment is installed.

(b) Annual reports must include the following information for the previous calendar year for the regulated equipment identified in subdivision (a) of this section:

- (1) Equipment information as prescribed in section 494-2.2(b)(2) of this Part.
 - (2) Service and leak repair information.
 - (i) Leak rate as calculated based on the rolling average method per 494-1.3 of this Part.
 - (ii) Date of each leak inspection.
 - (iii) Date of each leak detection.
 - (iv) Date of service or leak repair completed.
- (3) Regulated substance purchases and use information.
 - (i) Total weight in pounds of each regulated substance purchased for each supplier and the business name and address of each supplier.
 - (ii) Total weight in pounds of each regulated substance charged into the equipment.
 - (iii) Total weight in pounds of each regulated substance recovered from the equipment.

(iv) Total weight in pounds of each regulated substance stored in inventory at the facility, or stored at a different location for use in the facility, on the last day of the calendar year.

(v) Total weight in pounds of any regulated substance that was shipped by the owner or operator for reclamation, reported for each reclaimer and with the name and address of the reclaimer.

(vi) Total weight in pounds of any regulated substance that was shipped by the owner or operator for destruction, reported for each receiver and with the name and address of the receiver.

(4) Updated registration information as provided under section 494-2.2 of this Part including current information regarding the facility contact person and the number of specified components replaced in registered equipment.

§ 494-2.7 Record-Keeping Requirements

(a) Any owner or operator of a refrigeration or air conditioning equipment that exceeds a compliance threshold indicated in section 494-2.2 of this Part must maintain for five years and make available within 90 days upon request by the department in a manner determined by the department a copy of the following information:

(1) All registration information required by section 494-2.2 of this Part.

(2) Documentation of all leak inspections, dates and locations of identified leaks, dates on which any automatic leak detection systems triggered an alert, and annual audit and calibrations for leak inspection devices and automatic leak detection systems.

(3) Records of service and leak repairs including the name of the person performing the service, dates of refrigerant additions or equipment repairs, and documentation of any conditions allowing more than 14 days to repair a leak after detection under section 494-2.4 of this Part.

(4) Any retrofit or retirement plan required under section 494-2.5 of this Part.

(5) All reports required by section 494-2.6 of this Part.

(6) Any application for a variance under section 494-1.8 of this Part and any department notification of approval, denial, revocation, or modification of a variance.

(7) Any plan or other documentation indicating that the equipment will be replaced or retrofitted to a refrigerant with a GWP20 below 10. The plan or other documentation must include a signature of the facility representative.

(8) Invoices of all purchases of regulated substances.

(9) Records of all shipments of regulated substances for reclamation or destruction. The records must include all of the following information:

(i) name and address of the person the regulated substance was shipped to;

(ii) date of shipment;

(iii) regulated substance shipped;

(iv) purpose of shipment (e.g., reclamation or destruction); and

(v) Records of all refrigeration or air conditioning component data, measurements, calculations, and assumptions used to determine the full refrigerant charge capacity.

(b) The records in subdivision (a) of this section must be kept at the facility where the refrigeration or air conditioning equipment is in operation and must be made available to an authorized representative of the department upon request.

§ 494-2.8 Food Chain Refrigerant Replacement Program

(a) Retail Food Chains that own or operate facilities that are required to report annually per section 494-2.6 of this Part shall participate in the Refrigerant Replacement Program (RRP).

(b) On or before June 1, 2025 and annually thereafter, all persons subject to subdivision 494-2.8(a) of this Part shall report the following information in a manner determined by the department:

- (1) Business entity name.
- (2) Federal Tax Identification Number.
- (3) Business entity mailing address including a street address, city, state, and zip code.
- (4) Business entity location address including a street address, city, state, and zip code.
- (5) Business entity contact person name; phone number, and e-mail address.
- (6) Name, title, address, and contact person name and e-mail address for each retail food facility with equipment subject to this Part and under ownership or operational control of the business entity.

(c) All retail food facilities owned or operated by Retail Food Chains shall meet one of the following conditions by January 1, 2035:

- (1) All refrigerants used in refrigeration equipment containing 200 or more pounds of refrigerant have a GWP20 of less than 10.
- (2) Annual refrigerant loss from refrigeration equipment containing 200 or more pounds of refrigerant is one (1) percent or less.
- (3) Annual emissions from refrigerant loss from all equipment at each facility does not exceed a comparable emission quantity as would result from meeting conditions (1) or (2) of this subdivision at that facility.
- (4) There is an approved Replacement Plan per subdivision (d) of this section or an approved variance per section 494-1.8 of this Part.

(d) Replacement Plan. Retail Food Chains may submit a Replacement Plan in a manner determined by the department on or before January 1, 2027 that describes in detail how each facility will transition to meet equivalent emission reduction requirements as listed in paragraphs (1), (2), or (3) of subdivision (c) of this section. The Replacement Plan may include a request for an extension of time to comply with subdivision (c) of

this section for some of these facilities. An extension of time shall not extend beyond January 1, 2040 and all facilities must comply with subdivision (c) of this section by January 1, 2040. The department, in its discretion, may approve or conditionally approve extensions for the following types of facilities. The total number of facilities that receive an extension cannot exceed seventy-five percent of all facilities owned or operated by the Retail Food Chain in New York State:

(1) Facilities with supermarket systems that were installed after January 1, 2025.

(2) Up to half of the facilities registered in the year that the Replacement Plan is submitted per section 494-2.2 of this Part.

(3) Any facilities registered in the year that the Replacement Plan is submitted per section 494-2.2 of this Part that are located in a Disadvantaged Community.

(e) Retail Food Chains that do not operate equipment covered by section 494-2.2 of this Part may submit to the department at any time an attestation that they do not own or operate refrigeration equipment containing 200 or more pounds of regulated substances and that they are not subject to the requirements of this section.