Express Terms Summary

Part 494, Hydrofluorocarbon Standards and Reporting

The Department of Environmental Conservation (Department) proposes to create a new 6 NYCRR Part 494, Hydrofluorocarbon Standards and Reporting, adopting regulatory provisions previously promulgated by the United States Environmental Protection Agency (EPA), which were partially vacated in 2017. This rule adopts prohibitions on certain hydrofluorocarbon substances in the specific end-uses identified by the EPA as having safe and available alternatives. The rule also requires that certain manufacturers include a written disclosure statement and maintain specific records.

Section 494.1 Purpose

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Section 494.1 Purpose

This section provides the purpose of the rulemaking, which includes mitigation of greenhouse gas pollution.

Section 494.2 Applicability

This section lists the regulated entities as persons who sell, offer for sale, enter into commerce, use, or install the substances in specific end-uses that would be prohibited pursuant to this Part. This section also provides that

except in the case of retrofitted equipment, this rule does not apply to products or equipment containing a prohibited substance acquired or manufactured prior to the applicable prohibition dates.

Section 494.3 Definitions

This section lists the definitions to be used for this Part, which are primarily derived from EPA regulatory language or other related regulations.

Section 494.4 Prohibitions

This section lists the prohibitions on certain hydrofluorocarbon substances in specific end-uses.

Section 494.5 Exemptions

This section exempts certain hydrofluorocarbon substances in specific end-uses from the prohibitions listed in Section 494.4. Exemptions include medical, industrial, military, space, and aviation end-uses that may not have safe and available alternatives.

Section 494.6 Administrative Requirements

This section mandates certain manufacturers to provide a label or written disclosure statement to buyers regarding the regulated substances and established prohibitions under this Part.

Section 494.7 Record-Keeping Requirements

This section requires certain manufacturers maintain specific records, including records pertaining to the sale and type of product or equipment containing regulated substances in the specific end-uses listed in Section 494.4.

Section 494.8 Severability

This section establishes that the sections of the rule are severable.

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)

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§ 494.1 Purpose

(a) This Part adopts prohibitions for certain hydrofluorocarbon substances in air conditioning and refrigeration equipment, aerosol propellants, and foam end-uses.

(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.

§ 494.2 Applicability

(a) This Part applies to any person who sells, offers for sale, installs, uses, or enters into commerce in the State of New York, any substance in end-uses listed in Section 494.4 of this Part.

(b) Substances used in end-uses listed in Section 494.5 of this Part are exempt from the prohibitions listed in Section 494.4 of this Part.

(c) Except where an existing system is retrofit after the applicable prohibition date, 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 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.

§ 494.3 Definitions

For the purposes of this Part, the following definitions apply:

(a) 'Aerosol Propellant.' A liquefied or compressed gas 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) 'Air Conditioning Equipment.' Chillers, both centrifugal chillers and positive displacement chillers, intended for comfort cooling of occupied spaces.

(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) ‘Centrifugal Chiller.’ 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 refrigeration.

(e) ‘Cold Storage Warehouse.’ A cooled facility designed to store meat, produce, dairy products, and other products that are delivered to other locations for sale to the ultimate consumer.

(f) ‘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.

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

(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.

(j) ‘Flexible Polyurethane.’ A non-rigid polyurethane foam.

(k) ‘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.

(l) ‘Household Refrigerators and 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) ‘Household Refrigerators and 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) 'Household Refrigerators and 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).

(o) 'Integral Skin Polyurethane.' A self-skinning polyurethane foam.

(p) 'Metered Dose Inhaler, or Medical Dose Inhaler, or MDI.' 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) 'Miscellaneous Residential Refrigeration 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.

(r) 'Motor-bearing equipment.' Equipment 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.

(t) 'Person.' Any individual, firm, association, organization, manufacturer, distributor, partnership, business trust, corporation, limited liability company, company, state, or local governmental agency or public district.

(u) 'Phenolic Insulation Board and Bunstock.' Boards, blocks, or other shapes fabricated with phenolic foam insulation.

(v) 'Polyolefin.' Foam sheets and tubes made of polyolefin.

(w) ‘Polystyrene Extruded Boardstock and Billet (XPS).’ Polystyrene foam produced on extruding machines in the form of continuous foam slabs which can be cut and shaped into panels.

(x) ‘Polystyrene Extruded Sheet.’ Polystyrene foam produced on extruding machines in the form of sheets.

(y) ‘Positive Displacement 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.

(z)‘Prohibition Date.’ The date after which new or retrofit equipment or products are prohibited, where applicable.

(aa) ‘Refrigerant or Refrigerant Gas.’ Any substance, including blends and mixtures, that is used for heat transfer purposes.

(bb) ‘Refrigerated Food Processing and Dispensing Equipment.’ 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) ‘Refrigeration Equipment.’ Any stationary device that is designed to contain and use refrigerant gas, including but not limited to retail or commercial refrigeration equipment, household refrigeration equipment, and cold storage warehouses.

(dd) ‘Remote Condensing 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.

(ee) ‘Residential use.’ Use by a private individual of a substance, or a 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.

(ff) ‘Retail Food Refrigeration or Commercial Refrigeration.’ Equipment 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.

(gg) ‘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) ‘Rigid Polyurethane and Polyisocyanurate Laminated Boardstock.’ Laminated board insulation made with polyurethane or polyisocyanurate foam.

(ii) ‘Rigid Polyurethane Appliance Foam.’ Polyurethane foam in domestic appliances used for insulation.

(jj) ‘Rigid Polyurethane Commercial Refrigeration and Sandwich Panels.’ Polyurethane foam used to provide insulation in walls and doors of commercial refrigeration equipment.

(kk) ‘Rigid Polyurethane High-pressure Two-component Spray 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) ‘Rigid Polyurethane Low-pressure Two-component Spray 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) ‘Rigid Polyurethane Marine Flotation Foam.’ Buoyancy or flotation polyurethane foam used in boat and ship manufacturing for both structural and flotation purposes.

(nn) ‘Rigid Polyurethane One-component Foam 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) ‘Rigid Polyurethane Slabstock and Other.’ A rigid closed-cell polyurethane foam formed into slabstock insulation for panels and fabricated shapes for pipes and vessels.

(pp) ‘Stand-alone 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; systems fully charged with refrigerant at the factory and typically require only an electricity supply to begin operation.

(qq) ‘Stand-alone Low-Temperature Unit.’ A stand-alone unit that maintains food or beverages at temperatures at or below 32°F (0 °C).

(rr) ‘Stand-alone Medium-Temperature Unit.’ A stand-alone unit that maintains food or beverages at temperatures above 32°F (0 °C).

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

(tt) ‘Supermarket 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.

(uu) ‘Use.’ Any utilization of a compound or any substance, 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, or in intermediate applications in the State of New York, such as formulation or packaging for other subsequent

applications. For the purposes of this regulation, use excludes residential use, but does not exclude manufacturing for the purpose of residential use.

(vv) 'Vending Machines.' Self-contained commercial food refrigeration equipment that dispense goods that must be kept cold or frozen.

§ 494.4 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.

(a) End-Use Category - Aerosol Propellants

End-Use	Prohibited Substances	Prohibition Date
1) Aerosol Propellants	HFC-125, HFC-134a, HFC-227ea and blends of HFC-227ea and HFC-134a	January 1, 2021

(b) End-Use Category – Air Conditioning

End-Use	Prohibited Substances	Prohibition Date
1) Centrifugal 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,	January 1, 2024

	R-422C, R-422D, R-423A, R-424A, R-434A, R-438A,R-507A, RS-44 (2003 composition), THR-03	
2) Positive Displacement Chillers (New)	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	January 1, 2024

(c) End-Use Category - Refrigeration

End-Use	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
(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	January 1, 2021

	426A, R 428A, R 434A, R 437A, R 438A, R 507A, RS24 (2002 formulation), RS 44 (2003 formulation), SP34E, THR-03	
(3) Household refrigerators and freezers—built in appliances (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, 2023
(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
(5) Supermarket Systems (New)	HFC-227ea, R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2021
(6) Supermarket Systems (Retrofit)	R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2021

(7) Remote Condensing Units (New)	HFC-227ea, R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2021
(8) Remote Condensing Units (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 Units Medium Temperature (New)	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-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	January 1, 2021
(10) Stand-alone Units Low Temperature (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
(11) Stand-alone Units (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–	January 1, 2022

	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	
(13) Vending machines (Retrofit)	R-404a, R-507a	January 1, 2021
(14) Cold Storage Warehouses (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

(d) End-Use Category – Foam

End-Use	Prohibited Substances	Prohibition Date
(1) Rigid Polyurethane and Polyisocyanurate Laminated Boardstock	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2021
(2) Flexible Polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2021

(3) Integral Skin Polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(4) Polystyrene Extruded Sheet	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(5) Phenolic Insulation Board and Bunstock	HFC-143a, HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2021
(6) Rigid Polyurethane Slabstock and Other	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(7) Rigid Polyurethane Appliance Foam	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(8) Rigid Polyurethane Commercial Refrigeration and Sandwich Panels	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(9) Polyolefin	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
(10) Rigid Polyurethane Marine Flotation Foam	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021

(11) Polystyrene Extruded Boardstock and 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 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 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

§ 494.5 Exemptions

The following table lists exemptions to the prohibitions listed in Section 494.4 of this Part..

(a) Table of Acceptable Uses

End-Use Category	Prohibited Substances	Acceptable Uses
1) Aerosol 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; 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 Metered Dose Inhalers for medical purposes; wound care sprays;

		topical coolant sprays for pain relief; and products for removing bandage adhesives from skin.
(2) Aerosol Propellants	HFC-227ea and blends of HFC-227ea and HFC-134a	FDA-approved Metered Dose Inhalers for medical purposes.
(3) Air Conditioning	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 Conditioning	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 – Except Rigid polyurethane (PU) spray foam	All substances in Section 494.4 of this Part prohibited for the foam end-use category	Military applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements until January 1, 2022.
(6) Foams – Except Rigid polyurethane (PU) spray foam	All substances in Section 494.4 of this Part prohibited for the	Space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to

	foam end-use category	performance or safety requirements until January 1, 2025.
(7) Rigid polyurethane (PU) two-component spray foam	All substances in Section 494.4 of this Part prohibited for the foam-end use category	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 until January 1, 2025.
(8) All End-Use Categories	Any substance prohibited from use in Section 494.4 of this Part.	Residential use as defined in Section 494.3 of this Part.

§ 494.6 Administrative Requirements.

(a) Any person who manufactures for sale or entry into commerce in the State of New York new motor-bearing equipment or new foam products in the end-uses listed and after the applicable prohibition dates in Section 494.4 of this Part, must provide: (i) a written disclosure statement to the buyer as part of the sales transaction and invoice; or (ii) a label on the equipment, product, or its packaging.

(b) The written disclosure statement or label may be combined with such statements required by other jurisdictions.

(c) The written disclosure statement or label 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) If not combined with a written disclosure statement 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.”

§ 494.7 Record-Keeping Requirements.

(a) As of the applicable prohibition date listed in Section 494.4 of this Part, 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 end-uses listed in Section 494.4 of this Part must maintain for five years and make available within 90 days upon request by the Department a copy of the following information:

(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 end-use;

(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 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; and

(8) A copy of the written disclosure statement or label issued to the buyer or recipient.

§ 494.8 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.

Regulatory Impact Statement Summary

6 NYCRR Part 494, Hydrofluorocarbon Standards and Reporting

A key source of greenhouse gases (GHGs) are hydrofluorocarbons (HFCs). Part 494 would adopt regulatory provisions similar to those promulgated by the United States Environmental Protection Agency (EPA) pursuant to the Clean Air Act and Significant New Alternatives Program (SNAP) but have since been partially vacated by the courts. Specifically, Part 494 would prohibit specific HFCs in certain refrigerants, aerosol propellants, and foam-blowing end uses. In the absence of national policies and federal action, New York State has the opportunity to adopt an action that will have a significant impact on GHG emissions in the State while building off of the extensive analysis and public review that formed the basis of the EPA rulemakings.

1. Statutory Authority

The statutory authority to promulgate this rulemaking is derived from the Department's obligations set out in the Environmental Conservation Law (ECL) at Sections 1-0101, 1-0303, 3-0301, 19-0103, 19-0105, 19-0107, 19-0301, 19-0303, 19-0305, 71-2103, 71-2105.

ECL Section 1-0101. This section declares that it is a policy of New York State to conserve, improve and protect its natural resources and environment and control air pollution. This section further declares that the Department shall promote patterns of development and technology which minimize adverse impact on the environment. The proposed rulemaking prohibits HFCs in certain end-uses, which minimizes the adverse impact on the environment from HFC emissions, thereby protecting the State's natural resources and environment.

ECL Section 1-0303. This section defines the term "pollution" as “the presence in the environment of conditions and or contaminants in quantities of characteristics which are or may be injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property

throughout such areas of the state as shall be affected thereby." Part 494 will remove contaminants in the form of HFC emissions and associated atmospheric concentrations of GHGs from the environment which are injurious to human, plant and animal life or to property throughout the State.

ECL Section 3-0301. This section empowers the Department to carry out the environmental policy of New York State set forth in section 1-0101. Section 3-0301 specifically empowers the Department to, among other things: provide for the prevention and abatement of air pollution; monitor the environment to afford more effective and efficient control practices; identify changes in ecological systems and to warn of emergency conditions; and adopt such regulations as may be necessary, convenient or desirable to effectuate the environmental policy of the State. The proposed rulemaking is necessary, convenient, and desirable to effectuate the State's policy of reducing GHG emissions.

ECL Section 19-0103. This section declares that it is the policy of New York State to maintain a reasonable degree of purity of air resources. In carrying out such policy, the Department is required to balance public health and welfare, the industrial development of the State, propagation and protection of flora and fauna, and the protection of personal property and other resources. To that end, the Department is required to use all available practical and reasonable methods to prevent and control air pollution in the State. The proposed rulemaking meets this requirement by preventing and controlling HFC emissions in the State, while also balancing interests through the establishment of specific exemptions.

ECL Section 19-0105. This section declares that it is the purpose of Article 19 of the ECL to safeguard the air resources of New York State under a program which is consistent with the policy expressed in section 19-0103 and in accordance with other provisions of Article 19. The proposed rulemaking serves to establish a regulatory program of limiting HFCs in certain end-uses, consistent with the policy expressed in Article 19 of preventing and controlling air pollution, including GHGs such as HFCs.

ECL Section 19-0107. "Air contaminant" is defined as "a dust, fume, gas, mist, odor, smoke, vapor, pollen,

noise or any combination thereof." "Air pollution" is defined as "the presence in the outdoor atmosphere of one or more air contaminants in quantities, of characteristics and of a duration which are injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property throughout the State or throughout such areas of the State as shall be affected thereby." HFC is an "air contaminant" that causes "air pollution" as defined in the ECL because it is a gas that is present in the atmosphere in quantities that engender climate change.

ECL Section 19-0301. This section declares that the Department has the power to promulgate regulations for preventing, controlling or prohibiting air pollution. This section provides authority for the Department to establish the proposed rulemaking because it furthers preventing and control of air pollution in the form of HFC emissions and associated atmospheric concentrations of GHGs.

ECL Section 19-0303 also establishes procedures for adopting any code, rule or regulation which contains a requirement that is more stringent than the Clean Air Act or regulations issued pursuant to the Act by the EPA. This requires the Department to include analysis in the Regulatory Impact Statement (RIS) explaining state regulatory requirements that are more stringent than those found in the Clean Air Act or its implementing regulations. The Federal Standards section, as well as elsewhere in this RIS, also explains how Part 494 would meet criteria in Section 19-0303(4), if it was applicable to this rulemaking. Further, the cost-effectiveness of the proposed revisions and whether reasonably available alternatives exist is discussed in the RIS.

ECL Section 19-0305. This section authorizes the Department to enforce the codes, rules and regulations established in accordance with Article 19.

Finally, Sections 71-2103 and 71-2105 set forth the civil and criminal penalty structures for violations of Article 19, as well as regulations promulgated thereunder.

2. Legislative Objectives

There is strong scientific evidence that the earth's climate is changing and that GHGs from HFCs and other human activities are the major contributor to this change. Climate change represents an enormous environmental challenge for the State because, unabated, it will have serious adverse impacts on the State's natural resources, public health, and infrastructure. HFCs are potent GHGs with up to 14,800 times the climate forcing ability of carbon dioxide.

Articles 1 and 3 of the ECL set out the overall state policy of protection of the environment and provide general authority to adopt and enforce measures to achieve this goal, including the regulation of air pollution originating from consumer products. Article 19 of the ECL was specifically adopted for the purpose of safeguarding the air resources of New York from pollution. Further, to meet the State's commitments regarding the reduction of GHG emissions, and consistent with existing legislative enactments in the Climate Leadership and Community Protection Act, Part 494 will control emissions of fluorinated greenhouse gases that contribute to climate change.

3. Needs and Benefits

Analyses conducted by the California Air Resources Board on behalf of the United State Climate Alliance suggests that the proposed action would result in annual emissions of HFCs in New York State that are 16% lower in 2030 compared to a Business As Usual scenario. Between 2020 and 2030, 17 million metric tons of CO2-equivalent emissions would be avoided by the proposed action.

Stakeholder Outreach

The Department conducted pre-proposal, stakeholder outreach throughout 2019, beginning with two public webinars held on November 14 and 18, 2018 to discuss the likely provisions of Part 494. The stakeholder

groups consisted of the regulated community to be affected by the proposed regulation, consultants, and interested environmental advocacy groups.

4. Costs

EPA estimated that the nationwide implementation of these prohibitions would result in a cumulative cost over the lifetime of affected equipment of up to $114.6 million[1]. New York State's share of these costs could be up to $6.9 million, as New York State makes up 6% of the U.S. population. However, this likely overestimates actual costs as: a) EPA's estimate of costs are primarily applied to manufacturers that are not located in New York State; b) the current proposal is more limited in scope than the EPA rules; and c) EPA rules began going into effect in 2016.

EPA determined that the majority of affected businesses would be retail food operations, but fewer than 0.1% of these businesses would incur any new costs, or costs greater than those already incurred as a result of other federal regulations. Instead, 79% of the total estimated cost from the EPA program would be incurred on manufacturers of stationary air-conditioning equipment ($63 million) and polystyrene foam products ($27.5 million), which represent fewer than 20 businesses nationwide.

For the largest set of businesses affected by this action, or retail food businesses, EPA considered that there would be no new costs as these entities are also in the process of replacing the affected equipment pursuant to the phase-down of ozone-depleting substances. The affected businesses may choose to transition to other, more climate-friendly and energy-efficient alternatives that would involve new costs.

[1] Supporting documents in EPA Docket ID Nos. EPA–HQ–OAR–2014–0198 and EPA–HQ–OAR–2015–0663

The regulation could indirectly affect consumers and businesses as it may affect the availability of products and equipment on the market, but such costs are also limited. In the case of consumer products, the proposed action applies to the sale and use of products manufactured after an effective date, not the continued sale of previously-manufactured products already in the State. In the case of equipment, the proposed action would not affect systems already installed or their servicing.

This proposed action may also impose new administrative and record-keeping costs for certain manufacturers, however, the costs are limited. The Department may incur costs to issue and enforce the proposed action but can properly administer the regulation with the application of existing resources and current staff.

5. Paperwork

The proposed rule will impose minimal additional paperwork on certain manufacturers for recording-keeping and the creation and distribution of a written disclosure statement, but is not expected to be unduly burdensome.

6. Local Government Mandates

Part 494 will not create any mandates for local governments as compared to other entities.

7. Duplication

This proposal does not duplicate, overlap, or conflict with any other existing federal or State regulations or statutes. As stated earlier, while Part 494 is based on regulations previously promulgated by EPA, such applicable regulatory provisions and HFC restrictions have since been partially vacated by courts or failed implementation by EPA.

8. Alternatives

The Department considers the no action alternative infeasible because HFC emissions would further increase 36% in New York State by 2030, based on a Business as Usual scenario, reaching 10% of total allowable GHG emissions in the State. The regulation and compliance schedule are primarily based on EPA's SNAP rules, which considered a rigorous evaluation of available alternatives as well as extensive public review. An alternative that relies on voluntary actions and incentives to achieve the same level of reduction would be cost-prohibitive at this scale.

9. Federal Standards

Federal rules or restrictions for the provisions in Part 494 are not applied or enforced in all contexts. The regulation does not result in requirements that exceed any federal minimum standards because the rule is substantially based on previously promulgated federal regulations.

10. Compliance Schedule

This regulation will adopt a compliance schedule that prohibits specific substances in certain equipment and products:

January 1, 2021: Aerosol propellants; supermarket systems, remote condensing units, stand-alone units; one-component spray foam sealant and high-pressure two-component spray foams; rigid polyurethane and polyisocyanurate laminated boardstock, rigid polyurethane slabstock and other, rigid polyurethane appliance foam, rigid polyurethane commercial refrigeration and sandwich panels, rigid polyurethane marine flotation foam, flexible polyurethane, integral skin polyurethane, polystyrene extruded sheet, phenolic insulation board and bunstock, and polyolefin; low-pressure, two-component spray foam; polystyrene extruded boardstock and billet

(XPS); household refrigerators and freezers (compact), retrofitted vending machines, and refrigerated food processing and dispensing equipment.

January 1, 2022: Household refrigerators and freezers (other than built-in or compact) and new vending machines.

January 1, 2023: Cold storage warehouses and household refrigerators and freezers (built-in).

January 1, 2024: Centrifugal chillers and positive displacement chillers.

Regulatory Impact Statement

6 NYCRR Part 494, Hydrofluorocarbon Standards and Reporting

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A key source of greenhouse gases (GHGs) are hydrofluorocarbons (HFCs). In addition to having increased exponentially in recent decades, HFC emissions are expected to continue to grow through 2050. Part 494 would adopt regulatory provisions similar to those promulgated by the United States Environmental Protection Agency (EPA) pursuant to the Clean Air Act and Significant New Alternatives Program (SNAP) in 2015 and 2016. Specifically, Part 494 would prohibit specific HFCs in certain refrigerants, aerosol propellants, and foam-blowing agents end-uses that represent avoidable HFC emissions where safer alternatives are available. The SNAP rules

were partially vacated by the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit).[1] Further, EPA has failed to implement the rules, including issuing a guidance document purporting to eliminate restrictions on the use of HFCs,[2] however, such guidance document was vacated the D.C. Circuit.[3] In the absence of national policies and federal action, New York State has the opportunity to adopt an action that will have a significant impact on GHG emissions in the State while building off of the extensive, publicly-funded analysis and public review that formed the basis of the EPA rulemakings.

1. Statutory Authority

The statutory authority to promulgate this rulemaking is derived from the Department's obligation to prevent and control air pollution, including GHGs and HFCs, as set out in the Environmental Conservation Law (ECL) at Sections 1-0101, 1-0303, 3-0301, 19-0103, 19-0105, 19-0107, 19-0301, 19-0303, 19-0305, 71-2103, 71-2105.

ECL Section 1-0101. This section declares that it is a policy of New York State to conserve, improve and protect its natural resources and environment and control air pollution in order to enhance the health, safety and welfare of the people of New York State and their overall economic and social wellbeing. This section further declares that the Department shall promote patterns of development and technology which minimize adverse impact on the environment. The proposed rulemaking prohibits HFCs in certain end-uses, which minimizes the adverse impact on the environment from HFC emissions, thereby protecting the State's natural resources and environment.

ECL Section 1-0303. This section defines the term "pollution." Pollution is: "the presence in the

[1] *Mexichem Fluor, Inc. v. Envtl. Prot. Agency*, 866 F.3d 451 (D.C. Cir. 2017).
[2] 83 Fed. Reg. 18,431 (Apr. 27, 2018).
[3] *Nat. Res. Def. Council v. Wheeler*, 955 F.3d 68 (D.C. Cir. 2020).

environment of conditions and or contaminants in quantities of characteristics which are or may be injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property throughout such areas of the state as shall be affected thereby." The proposed rulemaking will remove contaminants in the form of HFC emissions and associated atmospheric concentrations of GHGs from the environment which are injurious to human, plant and animal life or to property throughout the State.

ECL Section 3-0301. This section empowers the Department to develop programs to carry out the environmental policy of New York State set forth in section 1-0101. Section 3-0301 specifically empowers the Department to, among other things: provide for the prevention and abatement of air pollution; monitor the environment to afford more effective and efficient control practices; identify changes in ecological systems and to warn of emergency conditions; and adopt such regulations as may be necessary, convenient or desirable to effectuate the environmental policy of the State. The proposed rulemaking is necessary, convenient, and desirable to effectuate the State's policy of reducing GHG emissions.

ECL Section 19-0103. This section declares that it is the policy of New York State to maintain a reasonable degree of purity of air resources. In carrying out such policy, the Department is required to balance public health and welfare, the industrial development of the State, propagation and protection of flora and fauna, and the protection of personal property and other resources. To that end, the Department is required to use all available practical and reasonable methods to prevent and control air pollution in the State. The proposed rulemaking meets this requirement by preventing and controlling HFC emissions in the State, while also balancing interests through the establishment of specific exemptions.

ECL Section 19-0105. This section declares that it is the purpose of Article 19 of the ECL to safeguard the air resources of New York State under a program which is consistent with the policy expressed in section 19-0103 and in accordance with other provisions of Article 19. The proposed rulemaking serves to establish a regulatory program of limiting HFCs in certain end-uses, consistent with the policy expressed in Article 19 of

preventing and controlling air pollution, including GHGs such as HFCs.

ECL Section 19-0107. This section defines the terms "air contaminant" and "air pollution." "Air contaminant" is defined as "a dust, fume, gas, mist, odor, smoke, vapor, pollen, noise or any combination thereof." "Air pollution" is defined as "the presence in the outdoor atmosphere of one or more air contaminants in quantities, of characteristics and of a duration which are injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property throughout the State or throughout such areas of the State as shall be affected thereby." HFC is an "air contaminant" that causes "air pollution" as defined in the ECL because it is a gas that is present in the outdoor atmosphere in quantities that engender and/or provoke climate change, which is injurious to life and property in New York State.

ECL Section 19-0301. This section declares that the Department has the power to promulgate regulations for preventing, controlling or prohibiting air pollution. This section provides authority for the Department to establish the proposed rulemaking because it furthers preventing and control of air pollution in the form of HFC emissions and associated atmospheric concentrations of GHGs.

ECL Section 19-0303 also establishes procedures for adopting any code, rule or regulation which contains a requirement that is more stringent than the Clean Air Act or regulations issued pursuant to the Clean Air Act by the EPA. This requires the Department to include analysis in the Regulatory Impact Statement (RIS) explaining State regulatory requirements that are more stringent than those found in the Clean Air Act or its implementing regulations. Since the D.C. Circuit partially vacated the EPA regulations establishing the phase-down of HFCs and EPA's subsequent guidance document, there are currently no federal prohibitions on the specific HFC substances in certain end-uses as proposed in Part 494. Federal regulatory requirements regarding HFCs are discussed further in the Federal Standards section of this RIS. The Federal Standards section, as well as elsewhere in this RIS, also explains how Part 494 would meet criteria in ECL Section 19-0303(4), if it was applicable to this rulemaking. Further, the cost-effectiveness of the proposed revisions and whether reasonably available

alternatives exist is discussed in the RIS. The RIS thoroughly discusses the public health and environmental protection benefits of the proposed revisions.

ECL Section 19-0305. This section authorizes the Department to enforce the codes, rules and regulations established in accordance with Article 19.

Finally, Sections 71-2103 and 71-2105 set forth the civil and criminal penalty structures for violations of Article 19, as well as regulations promulgated thereunder.

2. Legislative Objectives

There is strong scientific evidence that the earth's climate is changing and that GHGs from HFCs and other human activities are the major contributor to this change. Climate change represents an enormous environmental challenge for the State because, unabated, it will have serious adverse impacts on the State's natural resources, public health, and infrastructure. Substances comprised of HFCs and blends thereof were introduced as substitutes for ozone-depleting substances such as chlorofluorocarbons. However, HFCs are potent GHGs with up to 14,800 times the climate forcing ability of carbon dioxide. HFCs are included in the list of seven gases addressed under the United Nation’s Framework Convention on Climate Change and the Paris Climate Agreement. Furthermore, HFCs are planned to be phased-down internationally under the Kigali Amendment to the Montreal Protocol.

Articles 1 and 3 of the ECL set out the overall State policy of protection of the environment and provide general authority to adopt and enforce measures to achieve this goal, including the regulation of air pollution originating from consumer products. Article 19 of the ECL was specifically adopted for the purpose of safeguarding the air resources of New York from pollution. Further, to meet the State's commitments regarding the reduction of GHG emissions, and consistent with existing legislative enactments in the Climate Leadership

and Community Protection Act (CLCPA),[4] Part 494 will control emissions of fluorinated greenhouse gases that contribute to climate change. Specifically, the CLPCA includes HFCs in the statutory definition of GHG and codifies statutory requirements to reduce GHG emissions.[5] Further, the CLCPA contemplates measures to limit the use of chemicals, substances, or products that contribute to global climate change when released to the atmosphere as an action to achieve GHG emission reductions, which is the heart of Part 494.[6] The CLCPA grants the Department statutory authority to regulate and control GHG emissions to ensure compliance with the required statewide GHG emissions reduction limits.[7] Finally, the CLCPA explicitly states it shall not limit the existing authority of a state entity to adopt and implement GHG emissions reduction measures,[8] such as the Department's authority to regulate GHG emissions pursuant to ECL Article 19.

3. Needs and Benefits

The proposed rule prohibits high-Global Warming Potential substances in specific end-uses, including supermarket systems, refrigerators, foam-blowing agents, and aerosol propellants. Specifically, the rule applies to any person who sells, offers for sale, installs, uses, or enters into commerce in the State of New York any substance in the listed end-uses. Regarding any person who enters substances in the listed-end uses into commerce, the rule is intended to apply to intrastate commerce. However, the proposed rule provides flexibility based on safety and other considerations and includes the exemptions that accompanied these prohibitions when they were adopted in the EPA SNAP Program. Finally, in order to ensure compliance and provide for enforceability, the proposed rule requires disclosure and record-keeping requirements on covered end-uses.

[4] Chapter 106 of the Laws of 2019.
[5] ECL § 75-0101(7).
[6] ECL § 75-0111(12)(j).
[7] ECL § 75-0109.
[8] CLCPA § 10.

The proposed action is needed to mitigate the major sources of HFCs in the State of New York, which, as discussed, are highly-potent GHGs. Analyses conducted by the California Air Resources Board on behalf of the United State Climate Alliance suggests that the proposed action would result in annual emissions of HFCs in New York State that are 16% lower in 2030 compared to a Business As Usual scenario. Between 2020 and 2030, 17 million metric tons of CO2-equivalent emissions would be avoided by the proposed action, up to 2.3 million metric tons per year. By adopting prohibitions and regulatory provisions previously promulgated by EPA, the proposed action also builds off of the extensive review conducted by EPA to minimize overall risks to human health and the environment.[9]

Stakeholder Outreach

The Department conducted pre-proposal, stakeholder outreach throughout 2019, beginning with two public webinars held on November 14 and 18, 2018 to discuss the likely provisions of Part 494. Additional meetings regarding specific sectors also occurred, such as a meeting with the equipment manufacturing sector on December 11, 2019 and the foam-blowing sector on February 26, 2019. The stakeholder groups consisted of the regulated community to be affected by the proposed regulation, consultants, and interested environmental advocacy groups. The Department reviewed the feedback received in further developing Part 494.

4. Costs

The EPA estimated that the nationwide implementation of these prohibitions would result in a cumulative cost over the lifetime of affected equipment of up to $114.6 million.[10] New York State's share of these costs could be up to $6.9 million, as New York State makes up 6% of the United State population. However, this likely overestimates actual costs as: a) EPA's estimate of costs are primarily applied to manufacturers that are not

[9] Supporting documents in EPA Docket ID Nos. EPA–HQ–OAR–2014–0198 and EPA–HQ–OAR–2015–0663
[10] *Id.*

located in New York State; b) the current proposal is more limited in scope than the EPA rules; and c) EPA rules began going into effect in 2016. Hence, some of the affected entities have already made the transition to alternative substances and already incurred the costs that would be associated with this rulemaking.

EPA's estimation of cost focused on the specific industries directly affected by Part 494 and found these costs to be limited to very few individual businesses. EPA determined that the majority of affected businesses would be retail food operations (more than 640,000 businesses nationwide), but fewer than 0.1% of these businesses would incur any new costs, or costs greater than those already incurred as a result of other federal regulations.[11] Instead, 79% of the total estimated cost from the EPA program would be incurred on manufacturers of stationary air-conditioning equipment ($63 million) and polystyrene foam products ($27.5 million), which represent fewer than 20 businesses nationwide.[12]

For the largest set of businesses affected by this action, or retail food businesses, the EPA considered that there would be no new costs as these entities are also in the process of replacing the affected equipment pursuant to the phase-down of ozone-depleting substances.[13] Additionally, the prohibitions that are being adopted in this rulemaking do not include many "drop-in" alternatives. The affected businesses may choose to transition to other, more climate-friendly and energy-efficient alternatives that would involve new costs, but that is not required at this time.

The proposed rule does not apply to the use of the affected products or equipment by consumers (or "residential use"), although it does apply to the sale of those products to consumers. As such, this proposed action could indirectly affect consumers and businesses in the State of New York as it may affect the availability of products and equipment on the market, but such costs are also limited. In the case of consumer products, the

[11] *Id.*
[12] *Id.*
[13] *Id.*

proposed action applies to the sale and use of products manufactured after an effective date, not the continued sale of previously-manufactured products already in the State. In the case of equipment, the proposed action would not affect systems already installed or their servicing.

This proposed action may also impose new administrative and record-keeping costs for certain manufacturers. However, the State of California already requires the same administrative and record-keeping requirements on similar entities, so new costs are limited.[14] The Department may incur costs to issue and enforce the proposed action but can properly administer the regulation with the application of existing resources and current Department staff.

5. Paperwork

The proposed rule will impose minimal additional paperwork on certain manufacturers for recording-keeping and the creation and distribution of a written disclosure statement but is not expected to be unduly burdensome.

6. Local Government Mandates

Part 494 will not create any mandates for local governments as compared to other entities, including any additional compliance obligations.

7. Duplication

This proposal does not duplicate, overlap, or conflict with any other existing federal or State regulations or statutes. As stated earlier, while Part 494 is based on regulations previously promulgated by EPA, such applicable regulatory provisions and HFC restrictions have since been partially vacated by courts. Additionally, the proposed action aligns with other non-overlapping State and international rules to ensure consistency.

[14] California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4. Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration and Foam End-Uses.

8. Alternatives

While a no action alternative was evaluated, the Department considers the no action alternative infeasible because HFC emissions would further increase 36% in New York State by 2030, based on a Business as Usual scenario, reaching 10% of total allowable GHG emissions in the State (14 of 143mmt of CO2e based on 1990 emissions as estimated in the most recent New York State GHG Inventory[15]). The proposed action and compliance schedule were primarily based on EPA's SNAP rules, which considered a rigorous evaluation of available alternatives as well as extensive public review. An alternative that relies on voluntary actions and incentives to achieve the same level of reduction would be cost-prohibitive at this scale. Notably, based on information provided by the EPA, its voluntary program for the affected supermarkets, or the Green Chill program, has only attracted 29% of stores to become members, while national emissions have doubled over the same time period (55% increase in HFC emissions 2005-2016).[16]

9. Federal Standards

Due to the D.C. Circuit partial vacation of EPA rules, the federal rules or other restrictions do not apply or enforce the provisions proposed in Part 494 in all contexts. Further, EPA has generally failed to implement the rules. Given that the rule is based on previously promulgated federal regulations with the exception of some extended prohibition dates to accommodate lower GWP alternatives, the regulation does not result in the imposition of requirements that exceed any minimum standards of the federal government for the same or similar subject areas.

[15] NYSERDA. 2019. New York State Greenhouse Gas Inventory: 1990–2016.
[16] e.g., EPA Press Release. November 10,2019. https://www.epa.gov/newsreleases/epa-applauds-smart-refrigerant-management-supermarkets-across-america

10. Compliance Schedule

This regulation will adopt a compliance schedule that prohibits specific substances in certain new or retrofitted equipment and products and given certain exemptions. Notwithstanding the following compliance schedule, pursuant to Article 19 of the ECL, Part 494 will be effective 30 days after filing with the Department of State.

January 1, 2021: Aerosol propellants; supermarket systems, remote condensing units, stand-alone units; one-component spray foam sealant and high-pressure two-component spray foams; rigid polyurethane and polyisocyanurate laminated boardstock, rigid polyurethane slabstock and other, rigid polyurethane appliance foam, rigid polyurethane commercial refrigeration and sandwich panels, rigid polyurethane marine flotation foam, flexible polyurethane, integral skin polyurethane, polystyrene extruded sheet, phenolic insulation board and bunstock, and polyolefin; low-pressure, two-component spray foam; polystyrene extruded boardstock and billet (XPS); household refrigerators and freezers (compact), retrofitted vending machines, and refrigerated food processing and dispensing equipment.

January 1, 2022: Household refrigerators and freezers (other than built-in or compact) and new vending machines.

January 1, 2023: Cold storage warehouses and household refrigerators and freezers (built-in).

January 1, 2024: Centrifugal chillers and positive displacement chillers.

Assessment of Public Comments

6 NYCRR Part 496, Hydrofluorocarbon Standards and Reporting

Summary of the Assessment of Public Comments received from December 31, 2019 through March 16, 2020

The New York State Department of Conservation (Department) proposed Part 494 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (Part 494) in December 2019, held three public hearings on March 4, 6, and 9, 2020, and received comments to the proposed rule through March 16, 2020. The Department received 41 sets of comments on the proposed rule.

The Department received comments from individuals, manufacturers, trade organizations, environmental advocacy groups, community groups, and others. Almost all commenters voiced their support for the proposed rule. Other commenters expressed the opinion that the proposed rule would be more effective if implemented nationwide and by the federal government. The Department agrees and the proposed rule adopts a set of prohibitions that were in place at the federal level and have since been partially vacated by federal courts. New York State and other states have proposed adopting these prohibitions to prevent backsliding and to thereby mitigate emissions that would have otherwise been avoided if the federal government had maintained its policy. Some of the commenters who support the proposed rule indicated that the rule does not go far enough to address the emissions of hydrofluorocarbons, a potent greenhouse gas, and suggested several additional policies that should be considered by New York State. The Department agrees that additional State policies will be required, however these are beyond the scope of the proposed rule, which is focused on specific prohibitions that were in

place at the federal level. Some commenters expressed concern over State policies to promote heat pumps, which are a source of hydrofluorocarbon emissions, or to argue that the proposed policy would endanger their adoption. The proposed rule does not impose any prohibition on heat pumps.

Several commenters suggested revisions to definitions to provide additional clarity as well as consistency with other Departmental regulations. The Department made these revisions to the proposed rule, where appropriate. The manufacturers and trade organizations requested that additional language should be included in the regulations to clarify the applicability in certain cases, for example, that products and equipment that are manufactured prior to the applicable prohibition dates are not affected by this rule. Although this was already implicit to the terms of this regulation as originally proposed, the Department added explicit language addressing this in order to provide additional clarity. In some cases, commenters requested that some prohibition dates be either delayed or go into effect sooner. The proposed rule adopts specific prohibitions and a timeline finalized at the federal level that reflects the availability of safe alternatives. The only revision to the original proposal is to postpone the prohibitions related to new vending machines from January 1, 2021 to January 1, 2022, given the potential for further emission reductions and lower global warming potential alternatives that may be enabled by updated building codes.

Finally, many commenters requested revisions to the administrative requirements and the record-keeping requirements. Others requested that these requirements be waived, contending that the requirements are ineffective and burdensome to manufacturers or redundant with other requirements. The Department made revisions for the purposes of clarity and to indicate that it is acceptable to label a product's packaging, as requested. However, these requirements are

necessary in order to enable the Department to enforce the proposed rule and provide notice to persons about the prohibitions. Additionally, the Department has endeavored to align these requirements with those of other states that have adopted or proposed similar rules, thereby avoiding any additional burdens on regulated entities.

Comments received from December 31, 2019 through March 16, 2020

In December 2019, New York State Department of Environmental Conservation (Department) proposed regulations pertaining to the regulation of hydrofluorocarbons (HFCs). Comments on the proposed regulation were accepted from December 31, 2019 to March 16, 2020. Public hearings were held on March 4, 2020 in Albany, New York, March 6, 2020 in Rochester, New York, and March 9, 2020 in Long Island City, New York. This Assessment of Public Comments responds to all substantive comments received during the public comment period, including written comments as well as oral statements made at the three public hearings. Comments were compiled, reviewed, and categorized based on their content.

General Comments

Comment 1: The Commenter supports the proposed rule. (Commenter 2, 4, 8-15, 17-24, 26, 31-40)

Comment 2: By adopting a former United States Environmental Protection Agency (EPA) policy, the State is providing multiple benefits to the regulated industry including: (i) reinstating certainty to the market in the face of uncertain federal policy; (ii) appropriately rewarding those business entities that invested in research and development to comply with the EPA policy; and (iii) aiding United State business entities to remain competitive in the global market as HFCs are

phased down internationally under the Kigali Amendment to the Montreal Protocol. (Commenter 2, 12, 22, 26).

Comment 3: No State regulation should supersede the Kigali Amendment or the EPA's Significant New Alternatives Policy (SNAP) program. A market-based phasedown will perform better than one in which State regulations dictate. (Commenter 1)

Comment 4 : Federal regulations are the most desirable way to regulate the phasedown of HFCs. (Commenter 16)

Response to Comments 1-4: The Department appreciates the support that these commenters expressed for the global phasedown of HFCs. The Department agrees that a clear and certain timetable will minimize disruption to United States industry and that participation in a global phasedown is best achieved through national policy. However, under the current federal Administration, EPA is unfortunately not currently seeking to implement HFC policies and has rescinded existing HFC policies. Additionally, the United States Court of Appeals for the District of Columbia Circuit partially vacated Rules 20 and 21 of the EPA SNAP program that the Department has adopted in this regulation. The significant changes that have occurred in federal policy in recent years have led to uncertainty for industry as well as for those States, including New York, that recognize the urgent need for action to reduce the greenhouse gas emissions that cause climate change. The rule is intended to reinstate this certainty and reinforce the previous SNAP and Kigali Amendment policies.

Comment 5: The Commenter appreciates the unified approach taken by the Department and other State governments to implement aligned regulations and requests that States maintain

uniformity and avoid a “patchwork” of policies due to challenges to affected business entities. (Commenter 4, 5, 12, 13, 16, 18, 19, 22, 28)

Response to Comment 5: The Department will continue to work with States in the United States Climate Alliance to develop HFC reduction policies, per the direction of Governor Cuomo. The Department conducted extensive outreach with the United States Climate Alliance, other state agencies, and stakeholders in 2018 and 2019 to develop the rule and continues to track developments in other states into 2020. Wherever possible, the Department has made revisions in order to retain as much functional consistency as possible. That said, states cannot adopt identical regulations due to the variety of procedural requirements and other considerations. Additionally, some states enacted aspects of the EPA SNAP rules into statute, in addition to or in lieu of regulations, which would entail another set of procedures. The language found in state statutes may not be appropriate for state regulations. Statutes provide direction to Executive agencies like the Department; state agencies such as the Department implement and enforce such statutes through regulations. Where possible, the Department has considered how the direction provided in state and federal laws is best translated into regulatory language.

Comment 6: Alternative refrigerants have benefits other than reducing the emissions of greenhouse gases, including energy efficiency. (Commenter 2, 35)

Response to Comment 6: Thank you for your comment. The Department agrees that manufacturers and end-users will benefit from the replacement of equipment and products with alternatives that are more energy efficient and less harmful to the environment.

Acceptable Substitutes

Comment 7: The rule should list acceptable substitutes by listing the alternatives that will be allowed in lieu of the prohibited substances in the end-uses listed or by establishing Global Warming Potential (GWP) thresholds on the substances allowed for use in the state. Simply prohibiting specific HFCs from being used in certain products may not truly reduce the greenhouse gas emissions of these products. (Commenter 6, 39)

Response to Comment 7: The EPA SNAP program determines which substances are allowed for use in the United States as substitutes for ozone-depleting substances. The full list of allowable substances is available from the EPA. The rule addresses specific substances that were removed from the list of allowable substitutes, or "delisted", after an extensive rulemaking process and public review by EPA, pursuant to the partially vacated SNAP Rules 20 and 21. The current rule does not affect the use of any other substances nor does it seek to enable the use of any substance that has not yet been approved by the EPA pursuant to the SNAP program.

Applicability

Comment 8: In this case, does "residential use" [494.3(ee)] include use in housing facilities like dormitories, townhouse communities, and apartment buildings and even residential facilities such as assisted living facilities? (Commenter 3)

Response to Comment 8: Pursuant to the definition provided in the regulation, "residential use" means use by a private individual in a household for non-commercial purposes, so it depends on the type of person using the prohibited substance in a specific end-use and the purpose of its use.

Comment 9: The Commenter asks if a specific industry is affected by the proposed rule and refers to a specific North American Industry Classification System code (NAICS).

Response to Comment 9: The Department is adopting prohibitions previously promulgated by the EPA in SNAP Rules 20 and 21. The affected industries, and NAICS codes, are referenced in the original EPA rulemaking documents and can be found in the Federal Register.

Comment 10: The rule must provide clear language regarding "sell-through", or the continued sale of equipment or products that were shipped prior to the prohibition date of this rule; that there are no restrictions on storing or transporting affected substances, equipment, or products in the State; and that the prohibitions apply to equipment and products manufactured after the prohibition date and not to equipment or products manufactured prior to that date. Specifically, the rule should specify that equipment and products manufactured prior to the prohibition date can continue to be sold, used, etc. (Commenter 5, 16, 19, 20, 26, 28)

Response to Comment 10: Except where an existing system is retrofitted after the applicable prohibition date, the Department never intended for the rule to prohibit products and equipment manufactured prior to the applicable prohibition date. Although already implicit to the terms of this regulation as originally proposed, the Department has revised the regulation to clarify any ambiguity and include explicit language in subdivision 494.2(c) that reflects this and provides clear direction regarding "sell-through". This clarifying "sell-through" provision is also consistent with language included in other states' corresponding HFC regulations.

Definitions

Comment 11: The Commenter requests that the Department also adopt a United States Department of Energy (DOE) definition of "residential consumer refrigeration product" that the State of Vermont placed into its HFC legislation. (Commenter 5)

Response to Comment 11: Although the term “residential consumer refrigeration product” does not exist in the referenced DOE regulation, it includes the following, “consumer refrigeration product means a refrigerator, refrigerator-freezer, freezer, or miscellaneous refrigeration product." The EPA SNAP program refers to such equipment as “household refrigerators and freezers,” which is included as a defined term in subdivision 494.3(l), and this term has been applied in proposed regulations by other states. The definition of these terms is the same in that the terms encompass the same types of equipment.

Comment 12: The Commenter recommends that the Department use the same definition of “aerosol propellant” as in 6 NYCRR Part 235. (Commenter 12)

Response to Comment 12: The Department agrees that the Part 235 is intended to address the same products and considers the definition in Part 235 to be functionally equivalent to the definition that was initially proposed for purposes of this Part 494 regulation. The Department has revised the definition of “aerosol propellant” in Part 494 so that it is the same in both rules.

Comment 13: The Commenter recommends using definitions for polyurethane and related end-uses that are more internally consistent and consistent with SNAP rules proposed in other states. Additionally, the terms “foam” and “foam blowing agent” should be treated as distinct. (Commenter 20, 28)

Comment 14: The term “foam-blowing agent” is confusing. We suggest using commonly understood terms like “equipment” or “product”. (Commenter 13)

Response to Comment 13 and 14: The Department generally agrees and has adopted the technical definitions recommended by Commenter 28, with three exceptions. The term “foam

blowing agent" has been removed from the regulation as it is implicit to the definition of foam. Although HFCs are used as foam blowing agents, the resulting foam product is the end-use that is being referenced in this rule. Secondly, the term "polyurethane" has not been added to the list of definitions. Instead, all end-use definitions have been simplified to refer to the type of foam. Finally, the Department has not used the examples provided within the recommended definitions where they were unnecessary. For example, "flexible polyurethane" is now defined as "a non-rigid polyurethane foam", but the additional phrase, "including but not limited to that used in furniture" has been omitted.

Comment 15: The Commenter recommends modifying the definition of "phenolic insulation board and bunstock" by removing the phrase "a large solid box-like structure formed during the production of polystyrene insulation." (Commenter 20)

Response to Comment 15: The Department has modified the definition of "phenolic insulation board and bunstock" for accuracy and to be consistent with the definitions for other foam products. Only phenolic bunstock is addressed in this regulation and the EPA SNAP program refers to the end-use as "phenolic insulation board and bunstock". As bunstock is formed in "box-like structures" that may be fabricated into other shapes, the revised definition refers to both potential forms of the foam product.

Prohibition Dates

Comment 16: The Department should maintain the proposed prohibition dates as adopted by the EPA. Delays are unnecessary and undermine emission reductions because the affected equipment and products will be a source of emissions throughout their life. (Commenter 18)

Comment 17: The Department should adopt earlier prohibition dates to those proposed to increase the strength of the rule. (Commenter 37, 39)

Response to Comments 16 and 17: The intent of the proposed rule is to adopt the prohibitions developed by the EPA after an extensive rulemaking process. The Department agreed with the rationale provided by the EPA regarding the scope and timing of these prohibitions and did not consider proposing prohibition dates that were earlier than those adopted by the EPA. However, the Department considered extensions to the prohibition dates on a case-by-case basis if such extensions would increase the potential for emission reductions within the State as noted below.

Comment 18: For end-uses prohibitions with a prohibition date of January 1, 2021, the manufacturers will have too little time to comply. As such, an additional period of time is requested. (Commenter 19, 30)

Comment 19: Although low-GWP refrigerant is already available, original equipment manufacturers simply do not have the products ready to be mass-produced or that local distributors are trained to carry them. Based on our contractor and wholesaler sales experience, it is likely that there will be refrigerants stockpiled and sales from across state lines into New York State that would be un-accounted for or deserting valuable inventory which would become unsellable. (Commenter 1)

Response to Comments 18 and 19: The Department disagrees that there has been insufficient time to prepare for the prohibitions proposed in this regulation. The prohibitions listed in the rule were adopted by the EPA in 2015 (Rule 20) and 2016 (Rule 21), after extensive public review, and such prohibitions were in place nationwide until 2019. Therefore, regulated industry was on notice of these prohibitions on a nationwide basis years prior to the proposal and subsequent

finalization of this rule in the State. New York State also announced its intention to adopt the prohibitions in Rules 20 and 21 in 2018. Additionally, as clarified in response to comment 10, this rule does not impact the continued use of existing equipment or its servicing.

Comment 20: The Commenter supports the adoption of the EPA SNAP rule and the prohibition dates for Polystyrene Extruded Boardstock and Billet (XPS) therein because companies have made investments to comply with the timeline that had been adopted by EPA. (Commenter 26)

Comment 21: The Commenters request that the prohibition date for Polystyrene Extruded Boardstock and Billet (XPS) and Rigid Polyurethane Sprays be extended one year, e.g., from January 2021 to January 2022. The Commenters also request that a “carve-out” be added to allow for blends of the otherwise prohibited substances that may be approved by EPA in the future. The Department should be uniform with other states that have agreed to this request. Finally, reformulation takes 12-18 months, but the proposed rule allows "only a few months at most to comply after the proposal becomes final." (Commenter 25, 27, 30)

Comment 22: In the Regulatory Impact Statement, the Department indicated that HFCs are 5% of the State’s greenhouse gas emissions. The foam end-uses are 8% of HFC emissions, which is far less than other end-use sectors. The emissions associated with foam insulation are therefore negligible and the benefits of insulation for meeting overall greenhouse gas goals via improved energy efficiency and for reducing consumer energy bills is more consequential. (Commenter 25, 27, 30)

Response to Comments 20, 21, and 22: There is not sufficient reason to extend the compliance period or weaken the original SNAP provisions with regards to GWP, particularly as alternatives are available that would not impose the same risks to the State given their lower GWP.

Furthermore, climate change is the result of the combined impact of many emission sources, which makes arguments about the relatively small contribution of a given source less relevant and unpersuasive. In addition, pursuant to the Climate Leadership and Community Protection Act, Chapter 106 of the Laws of 2019 (Climate Act) the State is statutorily required to reduce all greenhouse gas emissions 40% by 2030 and 85% by 2050 from 1990 levels, and must also seek to achieve net zero emissions. Unlike other sources of greenhouse gas emissions in the State, HFC emissions have increased exponentially since 1990. Therefore, every opportunity to eliminate emission sources is vital, including the emissions associated with insulation foams.
In addition, as described above in response to comments 18 and 19, the regulated industry has long had notice about the timing and substance of the upcoming prohibitions.
Pursuant to the State Administrative Procedure Act, the Department can amend its regulations at any time, and is required to review regulations on a periodic basis. If there is a final EPA action listing new substances pursuant to SNAP, and such final action relates to the prohibitions that are the subject of this rulemaking, the Department will review and determine if additional action is necessary and in conformity with the Climate Act requirements, such as potential amendment of the regulatory language and express terms. Similarly, when undertaking the required periodic reviews, the Department will review the regulation in relation to any relevant final EPA actions.

Comment 23: The Commenter requests that the prohibition date for vending machines be extended from January 1, 2021 to January 1, 2022. The industry prefers to transition fully to the lowest GWP option, or R-290, rather than to make an interim transition to other available alternatives with much higher GWP. However, building codes must be updated enable the use of R-290 in all applications. (Commenter 7)

Response to Comment 23: The Department agrees that in this case there is a potential opportunity for further HFC emission reductions with the extension of one additional year for this end-use to allow for transition to lower GWP alternatives that may be enabled by updated building codes. Therefore, in the final rule, this prohibition date has been changed from January 1, 2021 to January 1, 2022 in 494.4(c)(12). However, this extension is applied only to new equipment and is not applied to equipment retrofits.

Administrative Requirements (Disclosures and Labelling)

Comment 24: The Department's allowance for compliance via the regulatory requirements of other jurisdictions is appreciated as it simplifies compliance. (Commenter 13)

Comment 25: The disclosure or labelling requirements in the Department's rule should be consistent with other states and generic. (Commenter 5, 19, 22)

Response to Comments 24 and 25: The Department agrees that an ideal solution is to establish a standardized approach among states that can be easily accommodated by the compliance entities. This was the rationale for allowing the required statement to be combined with that of other states, particularly the statement already required by the State of California.

The intent of the administrative requirement in Part 494 is to enable persons to understand that the equipment or product in question cannot be used in New York State with a substance that is prohibited by this Part. This notification is particularly relevant where the equipment or product is not fully assembled prior to entering the State and the prohibited substances are installed at a location in the State. The alternative approaches proposed by the other states include either a generic statement that the equipment or product is acceptable or provide information on the substance used in the equipment or product. These approaches are only relevant for equipment

and products that are “pre-charged” before entering the state and they provide no information as to whether the contents are prohibited in New York State.

The Department has made some minor clarifying revisions to the administrative requirements, as discussed below.

Comment 26: Some equipment end-uses are already subject to disclosure or labelling requirements for the purposes of safety and this includes the type of refrigerant. Additional requirements are not necessary. (Commenter 5, 16, 22)

Response to Comment 26: The Department recognizes that some of the equipment and products covered by this regulation are already required to provide some information as to contents, such as for safety. However, the Department is unaware of any requirement that indicates whether the contents are prohibited in New York State.

Comment 27: Any disclosure requirement should allow for the labeling of products or product packaging, as labeling individual product units may not be feasible or practical. (Commenter 13)

Response to Comment 27: The Department agrees and has revised the regulation in section 494.6 to provide this option.

Comment 28: The Commenter supports disclosure or labelling only for end-uses that currently use HFCs or at such time as HFCs are used in the future and suggests alternative language. (Commenter 13)

Response to Comment 28: The administrative and recordkeeping requirements apply to all end-uses subject to the regulation to provide notice to persons that the equipment or product in

question cannot be used in New York State with a substance that is prohibited by this Part and to ensure and track compliance.

Enforcement (Record-Keeping)

Comment 29: The proposed rule should more clearly describe applicable enforcement procedures. (Commenter 21, 24)

Response to Comment 29: The Department's enforcement authority and procedures are laid out in Article 71 of the Environmental Conservation Law (ECL). In particular, as noted in the Regulatory Impact Statement, ECL Sections 71-2103 and 71-2105 set forth the civil and criminal penalty structures for violations of Article 19, as well as regulations promulgated thereunder, including Part 494.

Comment 30: Confidential business information should not be provided or decipherable from the required record-keeping. This is subject to federal Department of Justice policy [a reference is not provided]. (Commenter 16, 19)

Response to Comment 30: To the extent that the Department requests records pursuant to this regulation, and such records include Confidential Business Information, the Department is already subject to restrictions on the use and storage of such information pursuant to Article 6 of the Public Officers Law.

Comment 31: The record-keeping requirement is inadequate as an enforcement mechanism. (Commenter 1, 24)

Comment 32: The record-keeping requirement should be struck entirely as an ineffective enforcement mechanism, as unnecessary, and as overly-challenging for manufacturers given the complexity of the supply chain. (Commenter 1)

Comment 33: The record-keeping requirement should be struck because it is not necessary for the effective enforcement of the prohibitions, overly broad in that the requirements apply to manufacturers that do not use the prohibited substances, and would create inconsistencies with other jurisdictions' regulations. The actual equipment or product sold within New York is the best evidence of compliance. The administrative requirements will not deter bad actors and only create additional administrative burdens for good actors. (Commenter 13)

Comment 34: Other states have agreed to remove record-keeping requirements from their proposed SNAP rules. (Commenter 16)

Comment 35: Stricter record-keeping requirements are needed, e.g., based on system size along with other requirements. (Comment 39)

Comment 36: Maintain the disclosure and record-keeping requirements as proposed. The Commenter disagrees that record-keeping should not be required as access to relevant data is essential for public management. (Commenter 23)

Response to Comments 31-36: The Department frequently relies on record-keeping as a mechanism to ensure compliance with regulatory requirements and to establish a record over a period of time. In this case, the requirements were written to align with those already in place in the State of California, so as to not introduce additional requirements on the same entities. The Department believes that the recordkeeping requirements in Section 494.7 will serve to facilitate compliance and enforcement, while not imposing additional requirements beyond those that exist

in other states. Therefore, the Department did not make substantive revisions to the recordkeeping requirements in Section 494.7.

Comment 37: HVAC equipment end-uses should be exempted from disclosure and record-keeping requirements. The Department should employ internet or electronic disclosure via the AHRI Directory. (Commenter 16, 19)

Response to Comment 37: The Department appreciates the intent of the suggestion to enable a third-party to maintain the records of multiple entities as a simplified approach to compliance, however, this is not sufficient for the purposes of ensuring that the Department is able to access the records from individual entities as needed. Additionally, the information that is required is not currently available in the AHRI Directory. Regulated entities may be able to use the services of third parties to assist in compliance, but it is the regulated entity, not the third party who will be contacted at such time as a record is requested.

Additional HFC Policy

Comment 38: This rule is not sufficient to meet the State's climate goals. The Department should undertake additional policies. Examples provided included regulatory and non-regulatory policies and programs directed at existing equipment, additional end-uses, end-users, leak management, refrigerant recycling and reuse, and proper disposal. (Commenter 9, 14-15, 17-19, 21, 23-24, 31-34, 36-39)

Response to Comment 38: The Department agrees that additional policies that are beyond the scope of this regulation will be needed to reduce HFC emissions in line with the State's statutory greenhouse gas reduction requirements and goals, as set forth in the Climate Act. The

Department intends to undertake additional regulatory and policy actions to further reduce greenhouse gas emissions, including HFCs, consistent with the requirements of the Climate Act.

Comment 39: Communities in New York require assistance from the Department in addressing HFC emissions. (Commenter 32, 33)

Response to Comment 39: The Department appreciates the hard work that community groups in New York have continued to put into addressing HFC emissions in recent years and in drawing attention to the need for additional statewide policies as well as programs to support local action.

Comment 40: New York State should establish a legal limit or emission reduction goal for HFC emissions from all sources as has been adopted into law in other states. Comments suggested that this be undertaken in the statewide emission limits that are to be promulgated by the Department per the Climate Act, which should specify a specific emission limit for HFCs. (Commenter 14, 17)

Response to Comment 40: The current regulation adopts specific prohibitions on the use of HFCs as previously promulgated on the national level as part of the EPA SNAP program. An economy-wide reduction goal, whether regulatory or legislative, is beyond the scope of this rulemaking. The Department is proposing a separate rulemaking, Part 496, Statewide Greenhouse Gas Emission Limits, to implement the statewide emission limits set forth in the Climate Act in ECL Section 75-0107. As noted above in response to comment 38, the Department intends to undertake additional regulatory and policy actions to further reduce greenhouse gas emissions, including HFCs, consistent with the requirements of the Climate Act.

Comment 41: The Commenter supports the proposed rule but requests that the rule be revised to include additional regulatory elements that have been proposed in the State of California, including the use of GWP thresholds on the end-uses proposed in this rule, applying such thresholds to additional end-uses not included in this rule, and the application of company-specific GWP compliance goals for the retail food industry. (Commenter 4, 17, 21, 23)

Response to Comment 41: The proposed rules in the State of California, which have not yet been finalized, cover additional end-uses that are beyond the scope of the current rulemaking. The Department therefore has not included these elements in this rulemaking.

Comment 42: The benefit of eliminating fossil fuels by switching to heat pumps is cumulatively much greater than the potential negative impact of losing the system's refrigerant charge into the atmosphere. The Commenter recommends incentives and other policies and programs to encourage best practices to minimize refrigerant loss. (Commenter 15)

Comment 43: The proposed rule should be expanded to encompass equipment such as heat pumps that also contain high-GWP refrigerants. (Commenter 8, 9, 17, 38-39)

Response to Comments 42 and 43: The intent of the current regulation is to adopt specific prohibitions on the use of HFC-based substances that were previously promulgated on the national level pursuant to the EPA SNAP program. These prohibitions did not extend to heat pumps and many other kinds of equipment that also utilize high-GWP refrigerants. Additional consideration would be needed in order to develop policies that are appropriate for those uses.

Comment 44: The proposed rule does not include other aspects of the EPA SNAP program including requirements regarding leakage. (Commenter 39)

Response to Comment 44: The Department is adopting prohibitions on the use of specific substances that were "delisted" from the EPA SNAP program pursuant to Rules 20 and 21 as acceptable substitutes for ozone-depleting substances. Other sections of the federal Clean Air Act also regulate intentional and unintentional releases of ozone-depleting substances and their substitutes. That separate policy is beyond the scope of the current rulemaking and was not considered as part of this regulation.

Comment 45: The proposed rule or future regulatory or non-regulatory actions by the Department should address the need for technician training to ensure the safe use of alternative refrigerants. (Commenter 1, 16, 19)

Response to Comment 45: While the need for technician training to ensure the safe use of alternative refrigerants is beyond the scope of this rulemaking, the Department agrees that the safe use of any substance is important.

Comment 46: Additional changes to building codes will be needed to enable the full transition to alternative refrigerants given flammability concerns. (Commenter 1, 7, 8, 15, 16, 18, 19, 41)

Response to Comment 46: The Department agrees that additional changes to state and municipal building codes may be needed to enable the use of new alternatives. These issues are also considered by EPA in its development of the SNAP program. The SNAP prohibitions adopted in the current rule reflect the EPA's extensive public process, which included an evaluation of the availability of acceptable alternatives for the end-uses included in this rule.

Comment 47: The proposed rule should specifically address and possibly allow for the use of reclaimed refrigerant as an acceptable alternative to the refrigerants that are prohibited in this rule. (Commenter 1, 16, 17)

Response to Comment 47: The Department also considers refrigerant reclamation to be potentially valuable as a component of HFC reduction policy, but it was not considered as part of the current regulation. If reclaimed refrigerant was in demand and had a high monetary value, it is possible that users may be incentivized to collect rather than release these refrigerants. However, the policies that may be required to properly verify and monitor reclaimed refrigerant is beyond the scope of the current rulemaking, which is focused on adopting prohibitions on the use of specific substances. Additionally, reclaimed refrigerant would have the same impact in terms of GWP as virgin refrigerant. The current rule is specifically intended to address the use of refrigerants in newly manufactured equipment, which unlike existing equipment, can use alternative substances that are not as harmful if released into the atmosphere.

Comment 48: Why were mobile sources (vehicle air-conditioning) not included in the proposed rule? (Commenter 9, 35)

Response to Comment 48: To be consistent with other United States Climate Alliance states, this rulemaking does not regulate mobile vehicle air-conditioning.

Comment 49: The commenter notes that there is a double problem with ice cream trucks that would be a source of refrigerant emissions as well carbon dioxide released from the exhaust while idling. (Commenter 9)

Response to Comment 49: This regulation is focused on HFCs; vehicle idling is outside the scope of this regulation. However, ice cream trucks may be subject to HFC prohibitions in the refrigerant-related end-uses listed in the regulation.

List of Commenters

1 H. Brad Kivlan, IV, Dynatemp International, Inc.

2 Durwood Zaelke, Stephen Anderson, Kristen Taddonio, Institute for Governance and Sustainable Development

3 Ilene Miller

4 Ronald Shebik, Hussman Corporation

5 Kevin Messner, Association of Home Appliance Manufacturers

6 Mary Yuen

7 Wes Fisher, National Automatic Merchandising Association

8 Patrick Landy

9 Catherine Skopic, Sierra Club NYC

10 Melissa Carlson, Roctricity LLC

11 Alex R. Kaplan

12 Nicholas Georges, Household & Commercial Products Association

13 Justin Kocher, Polyisocyanurate Insulation Manufacturers Association

14 Costa Constantinides, New York City Council Committee on Environmental Protection

15 Brian B. Eden, HeatSmart Tompkins

16 Charlie McCrudden (via Christina Banoub), Daikin US Corporation

17 Christina Starr, EIA

18 Christina Theodorides, NRDC and undersigned

19 Jennifer Kate, AHRI

20 Jessica Olsen, Honeywell

21 Julia Casagrande, NYC

22 Kevin Washington, Illinois Tool Works

23 Mark Schaeffer

24 Michael Helme, New Yorkers for Cool Refrigeration Management

25 Michelle Gross, DuPont

26 Paul Lewandowski, Owens Corning

27 Peter Geosits, Koura

28 Stephen Wieroniey, American Chemistry Council

29 Ramon Torres, ThermoFisher

30 Alan Karpman, Arkema

31 Marcy Denker, New Yorkers for Cool Refrigeration Management

32 Tara Vamos, New Yorkers for Cool Refrigeration Management

33 Janelle Peotter, New Yorkers for Cool Refrigeration Management

34 Pat Wartinger, Pachamama Alliance of the Rochester Area

35 David Ruben

36 Milena Novy-Marx P

37 Patricia Dorland, Pachamama Alliance of the Rochester Area

38 Susan Brown, Pachamama Alliance of the Rochester Area

39 Rachel Goodgal, 350.ORG and undersigned

40 Keith Voos, Drawdown

41 Anthony Sannazzaro, High Mark

Supporting Documents

6 NYCRR Part 494, Hydrofluorocarbon Standards and Reporting

Table of Contents

Rural Area Flexibility Analysis

1. Types and Estimated Numbers of Rural Areas:

The proposed rulemaking will apply statewide, and there are no requirements in the proposed rule that would apply only to rural areas.

2. Reporting, Record Keeping and Other Compliance Requirements; and Professional Services:

The proposed rulemaking establishes prohibitions on certain hydrofluorocarbon substances in specific end-uses and mandates record-keeping and written disclosure statement requirements on certain manufacturers. There are no specific prohibitions in the proposed regulation that apply exclusively to rural areas, and the compliance requirements apply regardless of whether the regulated entity is located in a rural area.

3. Costs:

Although the largest number of affected businesses are food stores, which may also be located in rural areas, the EPA analysis did not consider the regulatory provisions of Part 494 to incur new

costs on those stores. This conclusion was found the EPA's nationwide economic impacts analysis conducted in its rulemakings promulgated pursuant to the Clean Air Act and Significant New Alternatives Program (SNAP) in 2015 and 2016 adopting similar provisions in Part 494 but have since been partially vacated by the courts.

4. Minimizing Adverse Impact:

The Department has considered the issues and determined that Part 494 will not have an adverse impact on rural areas.

5. Rural Area Participation:

The Department conducted pre-proposal, stakeholder outreach throughout 2019, beginning with two public webinars held on November 14 and 18, 2018 to discuss the likely provisions of Part 494. Additional meetings regarding specific sectors also occurred, such as a meeting with the equipment manufacturing sector on December 11, 2018 and the foam-blowing sector on February 26, 2019. The stakeholder groups consisted of the regulated community to be affected by the proposed regulation, consultants, and interested environmental advocacy groups. The Department will hold public hearings on Part 494 in upstate and other rural areas and will notify interested parties of this proposed rulemaking.

Regulatory Flexibility Analysis for Small Businesses and Local Governments

1. Effect of Rule:

The New York State Department of Environmental Conservation is proposing to adopt prohibitions on the use of certain hydrofluorocarbon (HFC) substances in certain end-uses. The

proposed rulemaking applies statewide. Part 494 would adopt provisions similar to those in rules promulgated by the United States Environmental Protection Agency (EPA) pursuant to the Clean Air Act and Significant New Alternatives Program (SNAP) in 2015 and 2016 but have since been partially vacated by the courts. The EPA analyzed the nationwide economic impacts of these rules in their rulemakings and found that there would be no significant costs to small businesses. Specifically, the majority of businesses, including small businesses, affected by the national rules were retail food operations that were not expected to incur a change in costs, for example because 'drop-in' alternatives would still be allowed. In total, 99% of the small business that EPA determined would be affected by their rule were found to have zero additional costs. Of the remaining 442 small businesses nationwide that would incur a cost, 69 were expected to have costs in excess of 3% of annual sales, i.e., fewer than 100 businesses nationwide and fewer than 20% of affected entities. Therefore, the Department believes that the effects are mitigated by the scope of the proposed rule, which only applies to newly-manufactured or installed products or equipment and to end-uses for which safe alternatives are already available on the market, as determined by the EPA. The proposed rule also provides flexibility based on safety and other considerations and includes the exemptions that accompanied these prohibitions when they were adopted in the EPA SNAP Program. Finally, in order to ensure compliance and provide for enforceability, the proposed rule requires disclosure and record-keeping requirements on covered end-uses.

2. Compliance Requirements:

This is not a mandate on local governments. Local governments have no additional compliance obligations as compared to other subject entities. The proposed rulemaking establishes

prohibitions on certain hydrofluorocarbon substances in specific end-uses, including equipment or products in air-conditioning, refrigeration, aerosol propellant, or foam-blowing. The proposed rulemaking further mandates record-keeping and written disclosure statement requirements on certain manufacturers.

3. Professional Services:

There is no specific requirement or need for entities to contract for professional services in order to comply with the proposed rule., and the Department does not believe that regulated entities would need to acquire professional services to comply with Part 494.

4. Compliance Costs:

Based on the analysis of costs and economic impacts conducted by the EPA, compliance costs are expected to be insignificant.

5. Economic and Technological Feasibility:

Compliance with this rule is technologically feasible for all entities, including small businesses and local governments. The feasibility of this rule was determined in the EPA rulemaking processes, during which the specific end-uses included in the rules were determined to be those for which alternatives are available on the market.

6. Minimizing Adverse Impact:

The Department has considered the issues and determined that Part 494 will not have an adverse impact on small businesses or local governments. The ability to comply with Part 494 will not be

influenced by whether the regulatory provisions apply to a local government or small business, as compared to some other entity. Additionally, most if not all of the small businesses directly affected by Part 494, i.e. retail food operations, are required under the federal phase-down of ozone-depleting substances to replace non-compliant equipment. These businesses will not be required under this proposal to make a full transition away from HFC-based refrigerants, but are allowed to continue to use many existing HFC refrigerants that are lower cost than the climate-friendly alternatives. Additionally, the national prohibitions on aerosol propellants went into effect in 2016. As such, this rulemaking should not have an adverse impact as the affected businesses, such as the retailers of consumer products, were already expected be in compliance.

7. Small Business and Local Government Participation:

The Department conducted pre-proposal, stakeholder outreach throughout 2019, beginning with two public webinars held on November 14 and 18, 2018 to discuss the likely provisions of Part 494. Additional meetings regarding specific sectors also occurred, such as a meeting with the equipment manufacturing sector on December 11, 2018 and the foam-blowing sector on February 26, 2019. The stakeholder groups consisted of the regulated community to be affected by the proposed regulation, consultants, and interested environmental advocacy groups. The Department will hold public hearings on Part 494 and small businesses and local governments will be able to comment on the proposed rule during the notice and comment period.

Job Impact Statement

1. Nature of Impact:

The New York State Department of Environmental Conservation is proposing to adopt prohibitions on the use of certain hydrofluorocarbon (HFC) substances in certain end-uses. This rulemaking would adopt provisions similar to those promulgated by the United States Environmental Protection Agency (EPA) pursuant to the Clean Air Act and Significant New Alternatives Program (SNAP) in 2015 and 2016 but have since been partially vacated by the courts. Specifically, Part 494 would adopt prohibitions of certain products and equipment that use certain hydrofluorocarbon substances, specifically those prohibitions on air-conditioning, refrigeration, aerosol propellant, and foam-blowing applications. These prohibitions apply to new or retrofitted equipment and new products only, the State is not proposing prohibitions on the sell-through of previously-manufactured products or equipment, or on the servicing of previously installed equipment. The proposed rulemaking applies statewide.

2. Categories and Numbers Affected:

To estimate the potential impacts on jobs and local communities, the Department relied on EPA's analysis conducted during the promulgation of the SNAP rules. Part 494 is not expected to impact jobs and employment opportunities in New York State. The Department believes that potential job impacts are mitigated by the scope of the proposed rule, which only applies to newly-manufactured or installed products and equipment and to end-uses for which safe alternatives are already available on the market, as determined by the EPA. The rule does not prohibit the sale of products or equipment manufactured prior to the effective year indicated in the proposed rule or to the continued maintenance of existing equipment.

3. Regions of Adverse Impact:

The proposed rulemaking applies statewide. There are no regions of the State where jobs or employment opportunities are expected to be adversely impacted by this rule.

4. Minimizing Adverse Impact:

As detailed above, this rule is not expected to have a significant adverse impact on jobs and employment.