

Adopt new 310 CMR 7.76 *Prohibitions on Use of Certain Hydrofluorocarbons in Refrigeration, Chillers, Aerosol Propellants, and Foam End-Uses* to read as follows:

(1) Purpose.

The purposes of 310 CMR 7.76 are to prevent and control pollution to the atmosphere as required by Sections 142A and 142B of Chapter 111 of the General Laws, to support Massachusetts in achieving greenhouse gas emissions reductions goals established pursuant to Chapter 21N of the General Laws and to reduce hydrofluorocarbon emissions by adopting specific prohibitions for certain substances in refrigeration equipment, chillers, aerosol propellants, and foam end-uses.

(2) Definitions.

The definitions in 310 CMR 7.76(2) apply to 310 CMR 7.76. Where a term defined in 310 CMR 7.70 also appears in 310 CMR 7.76, the definition in 310 CMR 7.76 is applicable for the purpose of 310 CMR 7.76.

Aerosol Propellant. A compressed gas or vapor in a container which, upon release of pressure and expansion through a valve, carries another substance from the container as a mist or spray.

Air Conditioning Equipment. Chillers, both centrifugal chillers and positive displacement chillers, intended for comfort cooling of occupied spaces.

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.

Centrifugal Chiller. Air conditioning equipment that utilizes a centrifugal compressor in a vapor-compression refrigeration cycle. Under Centrifugal Chiller, a centrifugal chiller is a chiller intended for comfort cooling and does not include chillers used for industrial process cooling and refrigeration.

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 consumers.

Component. A part of a refrigeration system including, but not limited to, a condensing unit, compressor, condenser, evaporator, and receiver; and all of its connections and subassemblies, without which the refrigeration system will not properly function or will be subject to failures.

Cumulative Replacement. All additions or changes in multiple components within a three-year period.

Effective Date of Prohibition. The date on which the prohibitions in 310 CMR 7.76(6) take effect.

End-use. Processes or classes of specific applications within industry sectors including, but not limited to, those listed in 310 CMR 7.76(6).

Flexible Polyurethane. A non-rigid polyurethane foam including, but not limited to, that used in furniture, bedding, and chair cushions.

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.

Foam Blowing Agent. A substance that functions as a source of gas to generate bubbles or cells in the mixture during the formation of foam.

Household Refrigerators and Freezers. Refrigerators, refrigerator-freezers, freezers, and miscellaneous household refrigeration appliances intended for residential use. For the purposes of 310 CMR 7.76, Household Refrigerators and Freezers does not include Household Refrigerators and Freezers - Compact, or Household Refrigerators and Freezers - Built-in.

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).

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 to accept a custom front panel.

Hydrofluorocarbon or HFC. A class of greenhouse gases that are saturated organic compounds containing hydrogen, fluorine, and carbon.

Integral Skin Polyurethane. A self-skinning polyurethane foam including, but not limited to, that used in car steering wheels and dashboards.

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, typically used for bronchodilation to treat symptoms of asthma, chronic obstructive pulmonary disease (COPD), chronic bronchitis, emphysema, and other respiratory illnesses. An MDI consists of a pressurized canister of medication in a case with a mouthpiece.

New means:

- (a) products or equipment that are manufactured on or after the effective date of prohibition in 310 CMR 7.76: *Table 1*;
- (b) products or equipment first assembled and installed for an intended purpose with new or used components on or after the effective date of prohibition in 310 CMR 7.76: *Table 1*;
- (c) products or equipment to which components have been added to increase system capacity on or after the effective date of prohibition in 310 CMR 7.76(6): *Table 1*; or
- (d) products or equipment replaced or cumulatively replaced such that the cumulative capital cost on or after the effective date of prohibition 310 CMR 7.76: *Table 1* of replacement exceeds 50% of the capital cost of replacing the whole system.

Person. Any individual, firm, association, organization, manufacturer, distributor, partnership, trust, corporation, limited liability company, company, state, or local governmental agency or public district.

Phenolic Insulation Board and Bunstock. Phenolic insulation including, but not limited to, that used for roofing and walls. Bunstock is a large solid box-like structure formed during the production of polystyrene insulation.

Polyolefin. Foam sheets and tubes made of polyolefin, a macromolecule formed by the polymerization of olefin monomer units.

Polystyrene Extruded Boardstock and Billet (XPS). A foam formed from polymers of styrene and produced on extruding machines in the form of continuous foam slabs which can be cut and shaped into panels used for roofing, walls, flooring, and pipes.

Polystyrene Extruded Sheet. Polystyrene foam including, but not limited to, that used for packaging and buoyancy or floatation. It is also made into food-service items including, but not limited to, hinged polystyrene containers (for "take-out" from restaurants); food trays (meat and poultry), plates, bowls, and retail egg containers.

Polyurethane. A polymer formed principally by the reaction of an isocyanate and a polyol.

Positive Displacement Chiller. Vapor compression cycle chillers that use positive displacement compressors, typically used for commercial comfort air conditioning. For the purpose of 310 CMR 7.76, Positive Displacement Chiller is a chiller intended for comfort cooling and does not include cooling for industrial process cooling and refrigeration.

Refrigerant. Any substance, including blends and mixtures, which is used for heat transfer purposes.

Refrigerated Food Processing and Dispensing Equipment. Retail food refrigeration equipment that is designed to process food and beverages that are intended for immediate or near-immediate consumption including, but not limited to, chilled and frozen beverages, ice cream, and whipped cream. For the purpose of 310 CMR 7.76, Refrigerated Food Processing and Dispensing Equipment does not include water coolers, or units designed solely to cool and dispense water.

Refrigeration Equipment. Any stationary device that is designed to contain and use refrigerant to establish or maintain colder than ambient temperatures in a confined space including, but not limited to, retail or commercial refrigeration equipment, household refrigerators and freezers, and cold storage warehouses.

Remote Condensing Units. Retail refrigeration equipment or units that have a central condensing portion and may consist of compressors, condensers, and receivers assembled into a single unit, which may be located external to the sales area. The condensing portion (and often other parts of the system) is located outside the space or area cooled by the evaporator. For example, Remote Condensing Units are commonly installed in convenience stores, specialty shops (e.g., bakeries, butcher shops), supermarkets, restaurants, and other locations where food or other products are stored, served, or sold.

Residential Use. Use by a private individual of a substance, or a product containing the substance, in or around a permanent or temporary household, including use in both single and multi-unit dwellings, during recreation, or for any personal use or enjoyment. Use within a household for commercial or medical applications is not included in this definition, nor is use in automobiles, watercraft, or aircraft.

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 goods processing and dispensing equipment, remote condensing units, supermarket systems, and vending machines.

Retrofit. To convert an appliance from one refrigerant to another refrigerant. Retrofitting includes the conversion of the appliance 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 appliance components..

Rigid Polyurethane and Polyisocyanurate Laminated Boardstock. Laminated board insulation made with polyurethane or polyisocyanurate foam including, but not limited to, that used for roofing and walls.

Rigid Polyurethane Appliance Foam. Polyurethane insulation foam in domestic (e.g. residential) appliances.

Rigid Polyurethane Commercial Refrigeration and Sandwich Panels. Polyurethane

foam, used to provide insulation in walls and doors including, but not limited to, that used for commercial refrigeration equipment and garage doors.

Rigid Polyurethane High-Pressure Two-Component Spray Foam. A liquid polyurethane foam system sold as two parts (*i.e.*, A-side and B-side) in non-pressurized containers; and is field or factory applied *in situ* using high-pressure proportioning pumps at 800-1600 pounds per square inch (psi) and an application gun to mix and dispense the chemical components.

Rigid Polyurethane Low-Pressure Two-Component Spray Foam. A liquid polyurethane foam system sold as two parts (*i.e.*, A-side and B-side) in containers that are pressurized to less than 250 psi during manufacture of the system for application without pumps; and are typically applied *in situ* relying upon a liquid blowing agent and/or gaseous foam blowing agent that also serves as a propellant.

Rigid Polyurethane Marine Flotation Foam. Buoyancy or flotation polyurethane foam used in boat and ship manufacturing for both structural and flotation purposes.

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.

Rigid Polyurethane Slabstock and Other. A rigid closed-cell polyurethane foam formed into slabstock insulation for panels and fabricated shapes for pipes and vessels.

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 is entirely brazed or welded. These systems are fully charged with refrigerant at the factory and typically require only an electricity supply to begin operation.

Stand-Alone Low-Temperature Unit. A stand-alone unit that maintains goods at temperatures at or below 32°F (0°C).

Stand-Alone Medium-Temperature Unit. A stand-alone unit that maintains goods at temperatures above 32°F (0 °C).

State (when capitalized). The Commonwealth of Massachusetts for disclosure requirements in 310 CMR 7.76(5).

Substance. Any chemical intended for use in the end-uses listed in 310 CMR 7.76(6).

Supermarket Systems. Multiplex or centralized retail food refrigeration equipment systems designed to cool or refrigerate, which operate with racks of compressors installed in a machinery room and which includes both direct and indirect systems.

Use. Any utilization of any substance including, but not limited to, utilization in a manufacturing process or product in Massachusetts, consumption by the end-user in Massachusetts, or in intermediate applications in Massachusetts, such as formulation or packaging for other subsequent applications. For the purposes of 310 CMR 7.76, Use excludes residential use, but it does not exclude manufacturing for the purpose of residential use.

Vending Machines. A self-contained unit that dispenses goods that must be kept cold or frozen.

(3) Applicability.

310 CMR 7.76 applies to any person who sells, leases, rents, offers for sale, installs, uses, or manufactures, in Massachusetts, any product or equipment for the end-uses listed in 310 CMR 7.76(6). 310 CMR 7.76 does not apply to any person in Massachusetts who uses for residential use any combination of a Household Refrigerator or Freezer, a Household Refrigerator or Freezer - Compact, or a Household Refrigerator or Freezer - Built-in.

(4) Prohibitions.

- (a) No person may sell, lease, rent, offer for sale, install, use or manufacture, in Massachusetts, any product or equipment that uses or will use a prohibited substance in the end-uses listed in 310 CMR 7.76(6), unless an exemption is provided for the end-use in 310 CMR 7.76(7).
- (b) Except where existing equipment is retrofitted, nothing in 310 CMR 7.76 requires a person that acquired a product or equipment containing a prohibited substance prior to an effective date of prohibition in 310 CMR 7.76(6): *Table 1* to cease use of that product or equipment.
- (c) Products or equipment manufactured prior to the applicable effective date of the prohibitions in 310 CMR 7.76(6): *Table 1*, including foam systems not yet applied on site or new refrigeration equipment for which a facility has received a building permit prior to the effective date of prohibition, may be sold, leased, rented, imported, exported, distributed, installed, and used on or after the effective date of prohibition.

(5) Disclosure Statement.

Except for the exemptions listed in 310 CMR 7.76(7): *Table 1*, as of the effective date of prohibition in 310 CMR 7.76(6): *Table 1*, any person who manufactures for sale in Massachusetts products or equipment in the air conditioning, refrigeration, foam, or aerosol propellant end-uses listed in 310 CMR 7.76(6), must provide a written disclosure or label to the buyer as follows.

- (a) For motor-bearing refrigeration and air conditioning equipment that is neither factory-charged nor pre-charged with refrigerant, the required disclosure or label must state "This equipment is prohibited from using any substance on the "List of Prohibited Substances" for that specific end-use, in

accordance with State regulations for hydrofluorocarbons.”

(b) Except for products and equipment with existing labeling required by State building codes and safety standards which contain the information required in 310 CMR 7.76(5)(b)1. and 2., the disclosure or label for motor-bearing refrigeration and air conditioning equipment that are factory-charged or pre-charged with a hydrofluorocarbon or hydrofluorocarbon blend shall include:

1. The date of manufacture or a date code representing the date. If the manufacturer uses a date code for any product, the manufacturer shall file an explanation of each code with the Department; and
2. The refrigerant and foam blowing agent the product or equipment contains.

(c) Except for foam products with existing labeling required by State building codes and safety standards which contain the information required in 310 CMR 7.76(5)(c)1. and 2., the disclosure or label for foam products shall include one of the two alternatives in 310 CMR 7.76(5)(c)1. and 2.:

1. Alternative 1

- a. The date of manufacture or a date code representing the date. If the manufacturer uses a date code for any product, the manufacturer shall file an explanation of each code with the Department; and
- b. The foam blowing agent the product contains, or a reference to a Safety Data Sheet (complying with 29 CFR 1910.1200 requirements), if the latter identifies the foam blowing agent the product contains.

2. Alternative 2

- a. “Where sold, compliant with State HFC regulations.”

(d) For aerosol propellants, the disclosure or label shall include one of the two alternatives in 310 CMR 7.76(5)(d)1. and 2.:

1. Alternative 1

- a. The date of manufacture or a date code representing the date, which is indicated on the label, lid, or bottom of the container. If the manufacturer uses a date code for any product, the manufacturer shall file an explanation of each code with the Department; and
- b. The aerosol propellant the product contains, or availability of a Safety Data Sheet (complying with 29 CFR 1910.1200 requirements), if the latter identifies the propellant the product contains.

2. Alternative 2

- a. “Where sold, compliant with State HFC regulations.”

(6) List of Prohibited Substances by End-Use.

310 CMR 7.76(6): *Table 1* lists prohibited substances in specific end-uses and the effective date of prohibition, unless an exemption is provided for the end-use in 310 CMR 7.76(7). The prohibitions do not apply to products and equipment in specific end-uses manufactured prior to an applicable effective date of prohibition.

Table 1: End-use and Prohibited Substances.

End-Use	Prohibited Substances	Effective Date of Prohibition
End-Use Category: Aerosol Propellants		
Aerosol Propellants	HFC-125, HFC-134a, HFC-227ea and blends of HFC-227ea and HFC-134a	January 1, 2021
End-Use Category: Air Conditioning		
Centrifugal chillers (new)	FOR12A, FOR12B, HFC-134a, HFC-227ea, HFC-236fa, HFC245fa, R-125/ 134a/ 600a (28.1/70/1.9), R-125/ 290/ 134a/ 600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-423A, R-424A, R-434A, R438A, R-507A, RS-44 (2003 composition), THR-03	January 1, 2024
Positive displacement chillers (new)	FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R125/ 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, R438A, R-507A, RS-44 (2003 composition), SP34E, THR-03	January 1, 2024
End-Use Category: Refrigeration		
Cold storage warehouses (new)	HFC-227ea, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R404A, R-407A, R-407B, R-410A, R-410B, R-417A, R-421A, R421B, R-422A, R-422B, R-422C, R-422D, R-423A, R-424A, R428A, R-434A, R-438A, R-507A, RS-44 (2003 composition)	January 1, 2023
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
Household refrigerators and freezers—compact (new)	FOR12A, FOR12B, HFC-134a, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R424A, R-426A, R-428A, R-434A, R-437A, R-438A, R-507A, RS24 (2002 formulation), RS-44 (2003 formulation), SP34E, THR-03	January 1, 2021



End-Use	Prohibited Substances	Effective Date of Prohibition
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
Supermarket Systems (Retrofit)	R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R428A, R-434A, R-507A	January 1, 2021
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
Remote Condensing Units (Retrofit)	R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R428A, R-434A, R-507A	January 1, 2021
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
Stand-Alone Units (Retrofit)	R-404A, R-507A	January 1, 2021
Stand-Alone Medium-Temperature Units (New)	FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R407A, R-407B, R-407C, R-407F, R-410A, R-410B, R417A, R-421A, R-421B, R-422A, R-422B, R-422C, R422D, R-424A, R-426A, R-428A, R-434A, R-437A, R438A, R-507A, RS-24 (2002 formulation), RS-44 (2003 formulation), SP34E, THR-03	January 1, 2021
Stand-Alone Low-Temperature Units (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, R422A, R-422B, R-422C, R-422D, R-424A, R-428A, R434A, R-437A, R-438A, R-507A, RS-44 (2003 formulation)	January 1, 2021
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, R417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R424A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 formulation)	January 1, 2021

End-Use	Prohibited Substances	Effective Date of Prohibition
Vending Machines (Retrofit)	R-404A, R-507A	January 1, 2021
Vending Machines (New)	FOR12A, FOR12B, HFC-134a, KDD6, R125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R407C, R-410A, R-410B, R-417A, R-421A, R-422B, R422C, R-422D, R-426A, R-437A, R-438A, R-507A, RS-24 (2002 formulation), SP34E	January 1, 2022
<b>End-Use Category: Foams</b>		
Rigid Polyurethane and Polyisocyanurate Laminated Boardstock	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2021
Flexible Polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2021
Integral Skin Polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
Polystyrene Extruded Sheet	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
Phenolic Insulation Board and Bunstock	HFC-143a, HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2021
Rigid Polyurethane Slabstock and Other	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
Rigid Polyurethane Appliance Foam	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
Rigid Polyurethane Commercial Refrigeration and Sandwich Panels	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
Polyolefin	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
Rigid Polyurethane Marine Flotation Foam	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, Formacel Z-6	January 1, 2021
Polystyrene Extruded Boardstock and Billet (XPS)	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel B, Formacel Z-6	July 1, 2021

End-Use	Prohibited Substances	Effective Date of Prohibition
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
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
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

(7) Exemptions.

310 CMR 7.76(7): *Table 1* lists exemptions to the prohibited substances and end-uses in 310 CMR 7.76(6).

Table 1: Exemptions

End-Use Category	Prohibited Substances	Acceptable Uses
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; sprays for aerospace manufacturing and rework operations; pesticides for use near electrical wires, in aircraft, in total release insecticide foggers, or in certified organic use pesticides for which EPA has specifically disallowed all other lower-GWP propellants; mold release agents and mold cleaners; lubricants and cleaners for spinnerettes for synthetic fabrics; duster sprays specifically for removal of dust from photographic negatives, semiconductor chips, specimens under electron microscopes, and energized electrical equipment; adhesives and

		sealants in large canisters; document preservation sprays; FDA-approved MDIs for medical purposes; wound care sprays; topical coolant sprays for pain relief; and products for removing bandage adhesives from skin.
Aerosol Propellants	HFC-227ea and blends of HFC-227ea and HFC-134a	FDA-approved MDIs for medical purposes.
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.
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.
Foams – Except Rigid polyurethane (PU) spray foam	All substances	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.
Foams – Except Rigid polyurethane (PU) spray foam	All substances	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.
Rigid polyurethane (PU) two-component spray foam	All substances	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) Recordkeeping.

As of the effective date of prohibition for each end-use listed in 310 CMR 7.76(6): *Table 1*, any person who manufactures any product or equipment in the end-uses listed in 310 CMR 7.76(6), for sale or entry into commerce in Massachusetts must maintain for five years, and make available upon request by the Department, records sufficient to demonstrate that the product or equipment does not contain any substances listed in 310 CMR 7.76(6): *Table 1* as prohibited for that end-use or that the product is exempt in accordance with 310 CMR 7.76(7).