

**WAC 173-443-030 Definitions and acronyms.** The definitions in this section apply throughout this chapter unless the text clearly indicates otherwise.

"Aerosol propellant" means a liquid or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or other material from the same self-pressurized container or from a separate container.

"Air conditioning" means the process of treating air to meet the requirements of a conditioning space by controlling its temperature, humidity, cleanliness, or distribution. "Air conditioning" includes the use of chillers, except for purposes of applying a maximum GWP threshold for new air conditioning equipment under WAC 173-443-040, and the use of heat pumps.

"Air conditioning equipment" or "air conditioning system" or "air conditioning appliance" means the piece(s) of stationary equipment used to provide air conditioning. It is a combination of interconnected refrigerant-containing parts constituting one closed circuit in which a refrigerant is circulated for the purpose of extracting heat. "Air conditioning equipment" or "air conditioning system" or "air conditioning appliance" includes, but is not limited to, room air conditioners and residential and other dehumidifiers; ducted central air conditioners and heat pumps; nonducted air conditioners (both mini and multisplit); packaged roof top units; water source and ground source heat pumps; and remote condensing units used for comfort cooling. "Air conditioning equipment" or "air conditioning system" does not include mobile air conditioning systems, including those used in motor vehicles, rail and trains, aircraft, watercraft, recreational vehicles, recreational trailers, and campers. Where an air conditioning system is used for more than one application or end-use, the applicability of the prohibitions set forth in WAC 173-443-040 is determined by the application or end-use for which the majority of the operating capacity is used.

"Applicant" means:

(a) Any person who offers to sell, leases, rents, installs, uses, or otherwise causes to enter into Washington commerce any new refrigeration or air conditioning equipment that contains or uses a prohibited substance listed in WAC 173-443-040 (2) or (3) and who applies for a variance under WAC 173-443-095; or

(b) Any person who owns or operates a facility that has a refrigeration or air conditioning system that is subject to the refrigerant management program and who applies for an exemption under WAC 173-443-235.

"Automatic commercial ice machine" means a factory-made assembly (not necessarily shipped in one package) that consists of a condensing unit and ice making section operating as an integrated unit, with means for making and harvesting ice; and may include means for storing ice, dispensing ice, or storing and dispensing ice.

(a) "Batch type ice machine" means an ice machine having alternate freezing and harvesting periods.

(b) "Continuous type ice machine" means an ice machine that continually freezes and harvests ice at the same time.

"Automatic leak detection system" means a calibrated device using continuous monitoring for the purpose of detecting leakage of refrigerant.

erants that alerts the operator upon detection of a leak, and may be either:

(a) A direct system that automatically interprets the presence in air of refrigerant leaked from a refrigeration system;

(b) An indirect system that automatically interprets measurements (e.g., temperature or pressure) within a refrigeration system that indicates a refrigerant leak in refrigerated cases and other locations in the system.

"Bunstock" or "bun stock" means a large solid box-like structure formed during the production of polyurethane, polyisocyanurate, phenolic, or polystyrene insulation.

"C" means Celsius.

"Capital cost" means an expense incurred in the production of goods or in rendering services including, but not limited to, the cost of engineering, design, environmental consulting, purchase and installation of components or systems and instrumentation, contractor and construction fees, licensing fees, and financing.

"Certified reclaimer" means a person who is a certified reclaimer in accordance with 40 C.F.R. § 82.164.

"Certified refrigerant recovery or recycling equipment" has the same meaning as set forth in 40 C.F.R. § 82.152.

"Certified technician" means a person who holds a current, valid, and applicable certificate in accordance with 40 C.F.R. § 82.40 or 82.161.

"Change in ownership" means the transfer of a legal ownership interest in a facility with a refrigeration or air conditioning system that is subject to this chapter.

"Chiller" means a water or heat transfer fluid chilling equipment package custom built in place or a factory-made and prefabricated assembly of one or more compressors, condensers and evaporators, with interconnections and accessories including controls, designed for the purpose of cooling or heating water or a heat transfer fluid. A chiller is a machine specifically designed to make use of a vapor compression cycle or absorption refrigeration cycle to transfer heat from a cold water or heat transfer fluid circulating system to the air, a heat transfer fluid, or other heat exchange media. Chillers can be water-cooled, air-cooled, or evaporatively cooled. Chillers include, but are not limited to, rotary chillers, centrifugal chillers, and positive displacement chillers, including reciprocating, scroll, and screw chillers. A chiller used for air conditioning purposes is considered air conditioning equipment except for purposes of applying a GWP threshold under WAC 173-443-040, Table 2. A chiller used for refrigeration in a retail food facility is considered an indirect type of "supermarket system." A chiller used for industrial process refrigeration is considered a type of "other refrigeration" application. Where a chiller is used for more than one application or end-use, the applicability of the prohibitions set forth in WAC 173-443-040 is determined by the application or end-use for which the majority of the operating capacity is used.

"Code" means a collection of letters, numbers, graphics, or symbols that translates into a form that conveys the information provided by a dedicated or existing product label, or that can convey a user or reader to that information through electronic means (such as a QR code).

"Cold storage warehouse" means 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.

"Comfort cooling" means the air conditioning equipment used to provide cooling in order to control heat and/or humidity in occupied facilities including, but not limited to, residential, office, and commercial buildings. Comfort cooling equipment includes, but is not limited to, chillers, commercial split systems, and packaged roof-top units.

"Commercial ice machine" means a nonresidential ice machine or ice maker used in a commercial establishment to produce ice artificially for consumer use including, but not limited to, a hotel, restaurant, or convenience store.

"Commercial refrigeration" means refrigeration equipment used in the retail food and cold storage sectors. Retail food equipment includes the refrigeration equipment found in supermarkets, convenience stores, restaurants, and other food service establishments. Cold storage includes the refrigeration equipment used to store meat, produce, dairy products, and other perishable goods.

"Component" means a part of a refrigeration or air conditioning system including, but not limited to, condensing units, compressors, 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.

"Consumer" means the ultimate purchaser, recipient, or end-user of a product.

"Cumulative replacement" means the addition of or change in multiple components over time.

"Date of manufacture" means:

(a) For air conditioning and refrigeration equipment, the date displayed on the manufacturer's equipment label indicating the equipment's date of manufacture;

(b) For refrigeration and air conditioning equipment built up and completed on-site (field erected), the date that the refrigerant circuit was completed and initially filled with refrigerant; or

(c) For foam products imported into the state from outside the United States, the date the foam was originally manufactured, or the date of import if the original manufacture date is not known.

"Dedicated label" means a label adhered or attached to a product, or otherwise included with the product, that is designed to convey required information to the end-user of that product on the use of substances associated with that product.

"EPA" means the U.S. Environmental Protection Agency.

"Ecology" means the department of ecology.

"End-use" means processes or classes of specific applications within industry sectors including, but not limited to, those listed in WAC 173-443-040.

"Equipment" means a collection of components assembled or manufactured to function together that contains at least one product, or that is in and of itself a product.

"F" means Fahrenheit.

"Facility" means any property, plant, building structure, stationary source, stationary equipment or grouping of stationary equipment or stationary sources located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right of way, and under common operational control, that includes one or more refrigeration systems subject to this chapter. Operators of military installations may classify such installations as more than a single facility based on distinct

and independent functional groupings within contiguous military properties.

"Facility identification number" means a unique identification number provided by ecology for each facility with one or more refrigeration system(s) in operation pursuant to WAC 173-443-115.

"Flexible polyurethane" means a nonrigid polyurethane foam including, but not limited to, that used in furniture, bedding, and chair cushions.

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

"Foam system" means a multipart liquid product that expands when mixed to form a foam.

"Follow-up verification test" means a test conducted after an initial verification test and after the system has returned to normal operating characteristics and conditions in order to confirm that the repair was successful.

"Force majeure" means a sudden and unforeseeable event involving a clear danger, demanding action to prevent or mitigate the loss of, or damage to, life, health, property, or essential public services, arising from causes beyond the control of the applicant, which delays or prevents the performance of any obligation under this chapter, despite the applicant's best efforts to fulfill the obligation. This includes events where the local government, state, or federal government issues a declaration of emergency, which can include war, natural disasters, or pandemics. This does not include financial inability to comply if the financial hardship is caused by an event that is unrelated to the force majeure event or would otherwise exist in the absence of the force majeure event.

"Full charge" means the amount of refrigerant required in the refrigerant circuit for normal operating characteristics and conditions of a refrigeration system or refrigeration equipment, as determined by using one or a combination of the following four methods:

(a) Use of the equipment manufacturer's specifications of the full charge;

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

(c) Use of actual measurements of the amount of refrigerant added to or evacuated from the refrigeration equipment, including for seasonal variances; or

(d) The midpoint of an established range for full charge based on the best available data regarding the normal operating characteristics and conditions for the system.

"Global warming potential," "GWP," "global warming potential value," or "GWP value" means 100-year GWP value as it appears in WAC 173-441-040, and if not contained in WAC 173-441-040, then the GWP value means the 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in its Fifth Assessment Working Group 1 Report (AR5) (IPCC, 2013).

"Heat transfer fluid" means any gas or liquid used for the purpose of transmitting heat from one place to another.

"HFCs" or "hydrofluorocarbons" means a class of greenhouse gases that are saturated organic compounds containing hydrogen, fluorine, and carbon.

"Household refrigerators and freezers" means refrigerators, refrigerator-freezers, freezers, and miscellaneous household refrigeration equipment intended for residential use. "Household refrigerators and freezers" does not include "household refrigerators and freezers - Compact," or "household refrigerators and freezers - Built-in."

"Household refrigerators and freezers - Built-in" means 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.

"Household refrigerators and freezers - Compact" means any refrigerator, refrigerator-freezer or freezer intended for residential use with a total refrigerated volume of less than 7.75 cubic feet (220 liters).

"Ice rink" means a frozen body of water, hardened chemicals, or both including, but not limited to, professional ice-skating rinks and those used by the general public for recreational purposes.

"Industrial process refrigeration" means to cool or heat process streams at a specific location in manufacturing and other forms of industrial processes and applications such as chemical production, pharmaceutical, and petrochemical industries. This also includes equipment used in the generation of electricity and for large scale cooling of heat sources such as data centers and data servers. Industrial process refrigeration not using a chiller is considered a type of refrigeration equipment. Industrial process refrigeration using a chiller is considered a type of other refrigeration application. Where a chiller is used for more than one application or end-use, the applicability of the prohibitions set forth in WAC 173-443-040 is determined by the application or end-use for which the majority of the operating capacity is used.

"Integral skin polyurethane" means a self-skinning polyurethane foam including, but not limited to, that used in car steering wheels and dashboards.

"Leak rate calculation" means the rate at which a refrigeration or air conditioning system is losing refrigerant, measured between refrigerant charges or inspections. The leak rate is expressed in terms of the average percentage of the system's full charge lost on a monthly basis over the previous 12 months. The leak rate must be calculated using the 12-month rolling average method as follows:

(a) Step 1. Take the sum of the pounds of refrigerant added to the system over the previous 365-day period;

(b) Step 2. Divide the result of step 1 by the pounds of refrigerant the system normally contains at a full charge; and

(c) Step 3. Multiply the result of step 2 by 100 to obtain a percentage.

$$\text{leak rate} = \frac{\text{pounds of refrigerant added over previous 365 day period}}{\text{pounds of refrigerant normally contained in the system at full charge}} \times 100\%$$

"Low temperature refrigeration system" means a commercial or industrial process refrigeration system that maintains food, beverages, or other items at temperatures at or below 32°F (0°C).

"MDI" means metered dose inhaler or medical dose inhaler.

"Manufacturer" includes any person, firm, association, partnership, corporation, governmental entity, organization, or joint venture that produces any product that contains or uses HFCs or is an importer or domestic distributor of such a product. For purposes of WAC 173-443-065(3) and 173-443-075(3), a manufacturer is the installer of the equipment.

"Mission-critical military end-uses" means those uses of regulated substances, by an agency of the federal government responsible for national defense, that have a direct impact on mission capability, as determined by the U.S. Department of Defense including, but not limited to, uses necessary for development, testing, production, training, operation, and maintenance of armed forces deployable/expeditionary support equipment, munitions, and command and control systems.

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

"New air conditioning equipment" means any air conditioning equipment or system manufactured for an end-use listed in WAC 173-443-040, Table 3, that is first installed using new components, used components, or a combination of new and used components, and that is one of the following:

- (a) New construction in a new or existing facility;
- (b) A system in an existing facility with a single condenser and single evaporator that has a new exterior condenser, condensing unit, or remote condensing unit; or
- (c) A system in an existing facility with more than one condenser or more than one evaporator that is modified such that the system undergoes cumulative replacement of 75 percent or more of its indoor evaporator units (by number) and 100 percent of its air source or water source condensing units.

"New products or equipment" means products or equipment manufactured for an end-use listed in WAC 173-443-040, Table 1, that is one or more of the following:

- (a) Manufactured after the effective date of the prohibition;
- (b) First installed with new or used components, or expanded by the addition of components to increase capacity, after the effective date of the prohibition; or
- (c) Replaced or underwent cumulative replacement after the effective date of the prohibition such that the capital cost of replacement exceeds 50 percent of the capital cost of replacing the whole system, excluding display cases.

"New refrigeration equipment" means any refrigeration equipment or system manufactured for an end-use listed in WAC 173-443-040, Table 2, that is first installed using new components, used components, or a combination of new and used components, and that is one of the following:

- (a) New construction in a new or existing facility;
- (b) An addition or modification that increases the nominal compressor capacity and increases the cooling load of a system in an existing facility;

(c) New construction in an existing facility not previously used for retail food refrigeration, cold storage, ice rinks, or industrial process refrigeration; or

(d) A system in an existing facility used for retail food refrigeration, cold storage, ice rinks, or industrial process refrigeration that is modified such that the system undergoes cumulative replacement of 75 percent or more of its evaporators (by number) and 100 percent of its compressor racks, condensers, and connected evaporator loads.

"Nonessential consumer products" means the following products if they are propelled by, contain, or manufactured with a chlorofluorocarbon, hydrochlorofluorocarbon, or hydrofluorocarbon:

(a) Any plastic party streamer or noise horn including, but not limited to:

(i) String confetti;

(ii) Marine safety horns;

(iii) Sporting event horns;

(iv) Personal safety horns;

(v) Wall-mounted alarms used in factories or other work areas;

and

(vi) Intruder alarms used in homes or cars.

(b) Any cleaning fluid for electronic and photographic equipment for which there is not a low-GWP propellant approved by EPA for its use. This includes, but is not limited to:

(i) Liquid packaging;

(ii) Solvent wipes;

(iii) Solvent sprays; and

(iv) Gas sprays.

(c) Any plastic foam product, except any plastic foam product blown with CFC-11, but which contains no other Class I substances and where this product is used to provide thermal protection to external tanks for space vehicles.

"Nonretail foam products" means products consisting entirely of foam created solely to be an input for another product or manufacturing purpose resulting in another type of product.

"Normal operating characteristics and conditions" mean a refrigeration or air conditioning system's operating temperatures, pressures, fluid flows, speeds, and other characteristics, including full charge of the refrigeration or air conditioning system that would be expected for a given process load and ambient condition during operation.

"Offer for sale" means to make a transaction available regardless of any potential outcome. "Offer for sale" includes advertising for sale in any media such as a publication or broadcast that carries advertising including visual displays and any print/electronic forms.

"Online disclosure" means disclosing the substance(s) contained or used or the compliance status of the product or equipment by ensuring that the information is available on an internet website that is accessible to the public free of charge.

"Operate" means to have operational control of the facility.

"Operator" means the person or entity having operational control of the facility.

"Other air conditioning" or "other air conditioning equipment" means any residential or nonresidential air conditioning equipment or air conditioning system not otherwise defined as a room air conditioner, residential dehumidifier, or variable refrigerant flow (VRF) system.

"Other refrigeration" or "other refrigeration equipment" means any stationary, nonresidential refrigeration equipment that is used for an application other than retail food refrigeration, cold storage, ice rinks, industrial process refrigeration that does not use a chiller, or air conditioning; or is used for two or more applications including retail food refrigeration, cold storage, ice rinks, industrial process refrigeration, or air conditioning.

"PSI" means pounds per square inch.

"Packaged terminal air conditioner" or "PTAC" means a wall sleeve and a separate unencased combination of heating and cooling assemblies specified by the builder and intended for mounting through a wall. "Packaged terminal air conditioner" includes a prime source of refrigeration, separable outdoor louvers, forced ventilation, and heating availability by builder's choice of energy.

"Packaged terminal heat pump" or "PTHP" means a packaged terminal air conditioner that utilizes reverse cycle refrigeration as its prime heat source and can have supplementary heating availability by builder's choice of energy.

"Person" means an individual, partnership, franchise holder, association, corporation, a state, a city, a county, or any subdivision or instrumentality of the state.

"Phenolic insulation board and bunstock" means phenolic insulation including, but not limited to, that used for roofing and wall insulation.

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

"Polystyrene extruded boardstock and billet (XPS)" means 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" means polystyrene foam including that used for packaging and buoyancy or floatation. It is also made into food-service items, including hinged polystyrene containers (for "take-out" from restaurants); food trays (meat and poultry) plates, bowls, and retail egg containers.

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

"Portable air conditioner" means a portable encased assembly, other than a "packaged terminal air conditioner," "packaged terminal heat pump," or "residential dehumidifier," that delivers cooled, conditioned air to an enclosed space, and is powered by a single-phase electric current. It includes a source of refrigeration and may include additional means for air circulation and heating.

"Product" means an article manufactured or refined for sale that contains or uses a substitute.

"Prohibited substance" means a regulated refrigerant or a substitute that is prohibited from being used by or contained in products or equipment manufactured for end-uses described in WAC 173-443-040, Table 1 through Table 4.

"Refrigerant" or "refrigerant gas" means any substance, including blends and mixtures, which is used for heat transfer purposes and provides a warming or cooling effect.

"Refrigerant blend" means a mixture or combination of two or more single-component refrigerants.

"Refrigerated food processing and dispensing equipment" means 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 including, but not limited to, chilled and frozen beverages, ice cream, and whipped cream. This end-use excludes water coolers, or units designed solely to cool and dispense water.

"Refrigeration equipment" or "refrigeration system" or "refrigeration appliance" means any stationary device that is designed to contain and use a refrigerant. It is a combination of interconnected refrigerant-containing parts constituting one closed refrigerant circuit in which a refrigerant is circulated for the purpose of extracting heat. "Refrigeration equipment" or "refrigeration system" includes refrigeration equipment used in retail food, cold storage, industrial process refrigeration and cooling that does not use a chiller, ice rinks, and other refrigeration applications.

"Remote condensing unit" means refrigeration equipment or units that have a central condensing portion and may consist of one or more 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. Remote condensing units are commonly installed in convenience stores, specialty shops (e.g., bakeries, butcher shops), supermarkets, restaurants, and other locations where food is stored, served, or sold. For automatic commercial ice machines, "remote condensing" means a type of automatic commercial ice machine in which the ice-making mechanism and compressor are in separate sections.

"Residential dehumidifier" means a residential air conditioning system, other than a room air conditioner, that is a self-contained, electrically operated, portable, and mechanically encased assembly consisting of:

- (a) A refrigerated surface (evaporator) that condenses moisture from the atmosphere;
- (b) A refrigeration system, including an electric motor;
- (c) An air circulating fan; and
- (d) A means of collecting and disposing of the condensate.

"Retail foam products" means products consisting entirely of foam that are created for the purpose of selling or otherwise providing that product in a finished state that does not involve any additional manufacturing or refinement.

"Retail food refrigeration" means refrigeration that uses equipment designed to store and display chilled or frozen goods for commercial sale or use including, but not limited to, stand-alone units, refrigerated food processing and dispensing equipment, remote condensing units, and supermarket systems.

"Retrofit" means 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. For purposes of WAC 173-443-040 through 173-443-075, "retrofit" refers to an appliance or equipment that has undergone a retrofit.

"Rigid polyurethane and polyisocyanurate laminated boardstock" means laminated board insulation made with polyurethane or polyisocyanurate foam, including that used for roofing and walls.

"Rigid polyurethane appliance foam" means polyurethane foam in domestic appliances used for insulation.

"Rigid polyurethane commercial refrigeration and sandwich panels" means polyurethane foam used to provide insulation in walls and doors,

including that used for commercial refrigeration equipment, and used in doors, including garage doors.

"Rigid polyurethane high-pressure two-component spray foam" means a liquid polyurethane foam system sold as two parts (i.e., A-side and B-side) in nonpressurized containers; and is field or factory applied in situ using high-pressure proportioning pumps at 800 - 1600 psi and an application gun to mix and dispense the chemical components.

"Rigid polyurethane low-pressure two-component spray foam" means 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" means buoyancy or flotation polyurethane foam used in boat and ship manufacturing for both structural and flotation purposes.

"Rigid polyurethane one-component foam sealants" means 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" means a rigid closed-cell polyurethane foam formed into slabstock insulation for panels and fabricated shapes for pipes and vessels.

"Room air conditioner" includes window units, wall units, packaged terminal air conditioners (PTACs), packaged terminal heat pumps (PTHPs), and portable air conditioners.

"Small business" means any business entity, including a sole proprietorship, corporation, partnership, or other legal entity, that is owned or operated independently from all other businesses, and that has 50 or fewer employees.

"Small container of refrigerant" means a container having more than two ounces and less than two pounds of a refrigerant that is designed or intended for consumer recharge of a motor vehicle air conditioning (MVAC) system or consumer appliance.

"Stand-alone low-temperature unit" means a stand-alone unit that maintains food or beverages at temperatures at or below 32°F (0°C).

"Stand-alone medium-temperature unit" means a stand-alone unit that maintains food or beverages at temperatures above 32°F (0°C).

"Stand-alone unit" means retail refrigerators, freezers, and reach-in coolers (either open or with doors) where all refrigeration components are integrated and, for the smallest types, 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 unit, automatic commercial ice machine" means a self-contained type of automatic commercial ice maker in which the ice-making mechanism and storage compartment are in an integral cabinet.

"Stationary" means the system is:

- (a) Installed in a building, structure, or facility;
- (b) Attached to a foundation, or if not attached, will reside at the same location for more than 12 consecutive months; or
- (c) Located intermittently at the same facility for at least two consecutive years and operates at that facility a total of at least 90 days each year.

"Substitute" means a chemical, product substitute, or alternative manufacturing process, whether existing or new, that is used to per-

form a function previously performed by a class I substance or class II substance and any substitute subsequently adopted to perform that function including, but not limited to, hydrofluorocarbons. "Substitute" does not include 2-BTP or any compound as applied to its use in aerospace fire extinguishing systems.

"Sufficient disclosure" means providing the name of the substance.

"Supermarket systems" means 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.

"Symbol" means a graphical or hybrid word-graphical symbol for the purposes of conveying the types of substitutes used in the product or equipment and signaling that further information on the use of substitutes is available through online disclosure.

"System identification number" means a unique identification number for each refrigeration or air conditioning system at a facility. The system identification number is comprised of the facility identification number followed by a three-digit number starting at 001 and sequentially assigned to each unique refrigeration or air conditioning system.

"Unit" means a collection of like products bundled together for purposes of commerce.

"Unit label" means a label adhered or attached, or capable of being adhered or attached, to a collection of like products bundled together for purposes of commerce.

"Use" means any utilization of a compound or substance including, but not limited to, utilization in a product in Washington, consumption by the end-user in the state of Washington, or in intermediate applications in the state of Washington, such as formulation or packaging for other subsequent applications.

"Variable refrigerant flow (VRF) system" means an engineered direct expansion (DX) multisplit system incorporating the following: A split system air conditioner or heat pump incorporating a single refrigerant circuit that is a common piping network to two or more indoor evaporators each capable of independent control, or compressor units. "VRF systems" contain a single module outdoor unit or combined module outdoor units with at least one variable capacity compressor that has three or more stages, with air or water as the heat source. This includes "variable refrigerant volume (VRV) systems."

"Vending machine" means a self-contained unit that dispenses goods that must be kept cold or frozen.

"Verification test" means a leak test conducted after a repair is finished to verify that a leak has been repaired.

"Very low temperature refrigeration or cooling" means a refrigeration or cooling system that maintains temperatures below  $-58^{\circ}\text{F}$  ( $-50^{\circ}\text{C}$ ) including, but not limited to, medical and laboratory freezers, specialized industrial process cooling applications, and extreme temperature environmental testing.

**WAC 173-443-040 List of prohibited substances.** (1) Table 1 in this section lists prohibited substances in new products and equipment, as defined in WAC 173-443-030, and the effective date of the prohibition, unless an exemption is provided for in WAC 173-443-050.

**TABLE 1. Prohibited Substances for New Products and Equipment**

<b>End-Use Category: Aerosol Propellants</b>		
<b>End-Use</b>	<b>Prohibited Substances</b>	<b>Effective Date</b>
Aerosol propellants	HFC-125, HFC-134a, HFC-227ea and blends of HFC-227ea and HFC-134a	January 1, 2020
<b>End-Use Category: Air Conditioning</b>		
<b>End-Use</b>	<b>Prohibited Substances</b>	<b>Effective Date</b>
Centrifugal chillers - Cooling only (New)	FOR12A, FOR12B, HFC-134a, HFC-227ea, HFC-236fa, HFC-245fa, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-423A, R-424A, R-434A, R-438A, R-507A, RS-44 (2003 composition), THR-03	January 1, 2024
Positive displacement chillers - Cooling only (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
Centrifugal chillers - Heating and heating and cooling (New)	FOR12A, FOR12B, HFC-134a, HFC-227ea, HFC-236fa, HFC-245fa, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-423A, R-424A, R-434A, R-438A, R-507A, RS-44 (2003 composition), THR-03	January 1, 2025
Positive displacement chillers - Heating and heating and cooling (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, 2025
<b>End-Use Category: Refrigeration</b>		
<b>End-Use</b>	<b>Prohibited Substances</b>	<b>Effective Date</b>
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, 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, 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, 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, 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

<b>End-Use Category: Refrigeration</b>		
<b>End-Use</b>	<b>Prohibited Substances</b>	<b>Effective Date</b>
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, 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, 2023
Supermarket systems (Retrofit)	R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2020
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, 2020
Remote condensing units, except for automatic commercial ice machines (Retrofit)	R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2020
Remote condensing units, except for automatic commercial ice machines (New)	HFC-227ea, R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2020
Remote condensing units, automatic commercial ice machines ( <del>Remote condensing units</del> ) (New and retrofit)	(( <del>R-404A, R-507, R-507A, R-428A, R-422C, R-434A, R-421B, R-408A, R-422A, R-407B, R-402A, R-422D, R-421A, R-125/R-290/R-134a/R-600a (55.0/1.0/42.5/1.5), R-422B, R-424A, R-402B, GHG-X5, R-417A, R-438A, and R-410B</del> )) <del>R-402A, R-402B, R-404A, R-407B, R-408A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-438A, R-507A, R-125/290/134a/600a (55.0/1.0/42.5/1.5), RB-276, RS-24 (2002 formulation), RS-44 (2003 formulation), GHG-X5</del>	January 1, ((2025)) <u>2027</u>
Stand-alone units, except for automatic commercial ice machines (Retrofit)	R-404A, R-507A	January 1, 2020
Stand-alone medium-temperature units (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, 2020
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, 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, 2020
((Automatic commercial ice machines - Stand-alone units (New and retrofit)	R-404A, R-507, R-507A, R-428A, R-422C, R-434A, R-421B, R-408A, R-422A, R-407B, R-402A, R-422D, R-421A, R-125/R-290/R-134a/R-600a (55.0/1.0/42.5/1.5), R-422B, R-424A, R-402B, GHG-X5, R-417A, R-438A, R-410B, R-407A, R-410A, R-442A, R-417C, R-407F, R-437A, R-407C, RS-24 (2004 formulation), and HFC-134a	January 1, 2025))
Stand-alone units, automatic commercial ice machines; <u>Batch type with a harvest rate less than or equal to 1,000 pounds of ice per 24 hours; and</u> <u>Continuous type with a harvest rate less than or equal to 1,200 pounds of ice per 24 hours (New and retrofit)</u>	<u>Refrigerants with a GWP greater than 150</u>	<u>January 1, 2026</u>

<b>End-Use Category: Refrigeration</b>		
<b>End-Use</b>	<b>Prohibited Substances</b>	<b>Effective Date</b>
Stand-alone units, automatic commercial ice machines; Batch type with a harvest rate greater than 1,000 pounds of ice per 24 hours; and Continuous type with a harvest rate greater than 1,200 pounds of ice per 24 hours (New and retrofit)	R-402A, R-402B, R-404A, R-407A, R-407B, R-407C, R-407F, R-408A, R-410A, R-410B, R-411A, R-411B, R-417A, R-417C, R-420A, 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-442A, R-507, R-507A, HFC-134a, R-125/290/134a/600a (55.0/1.0/42.5/1.5), RB-279, RS-24 (2002 formulation), RS-44 (2003 formulation), GHG-X5, G2018c, Freeze 12	January 1, 2027
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
Vending machines (Retrofit)	R-404A, R-507A	January 1, 2022
Vending machines (New)	FOR12A, FOR12B, HFC-134a, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-426A, R-437A, R-438A, R-507A, RS-24 (2002 formulation), SP34E	January 1, 2022

<b>End-Use Category: Foams</b>		
<b>End-Use</b>	<b>Prohibited Substances</b>	<b>Effective Date</b>
Rigid polyurethane and polyisocyanurate laminated boardstock	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2020
Flexible polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2020
Integral skin polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2020
Polystyrene extruded sheet	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2020
Phenolic insulation board and bunstock	HFC-143a, HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	January 1, 2020
Rigid polyurethane slabstock and other	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2020
Rigid polyurethane appliance foam	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2020
Rigid polyurethane commercial refrigeration and sandwich panels	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2020
Polyolefin	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2020
Rigid polyurethane marine flotation foam	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel Z-6	January 1, 2020
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
Rigid polyurethane high-pressure two-component spray foam	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc 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, 2020
Rigid polyurethane low-pressure two-component spray foam	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc 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

<b>End-Use Category: Foams</b>		
<b>End-Use</b>	<b>Prohibited Substances</b>	<b>Effective Date</b>
Rigid polyurethane one-component foam sealants	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc 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, 2020

(2) Table 2 in this section lists prohibited substances in new or retrofit refrigeration equipment, as defined in WAC 173-443-030, with a full charge of more than 50 pounds and the effective date of the prohibition, unless an exemption is provided for in WAC 173-443-050.

**TABLE 2. Prohibited Substances for New or Retrofit Refrigeration Equipment**

<b>End-Use</b>	<b>Criteria</b>	<b>Prohibited Substances</b>	<b>Effective Date</b>
Commercial refrigeration: Retail food refrigeration including chillers (New)	New refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 150	January 1, 2025
Commercial refrigeration: Retail food refrigeration including chillers (Retrofit)	Retrofit refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 150	January 1, 2029
Commercial refrigeration: Cold storage warehouses (New)	New refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 150	January 1, 2025
Commercial refrigeration: Cold storage warehouses (Retrofit)	Retrofit refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 150	January 1, 2029
Industrial process refrigeration excluding chillers (New)	New refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 150	January 1, 2025
Industrial process refrigeration excluding chillers (Retrofit)	Retrofit refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 150	January 1, 2029
Chillers used for industrial process refrigeration (New)	New refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 750	January 1, 2025
Chillers used for industrial process refrigeration (Retrofit)	Retrofit refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 750	January 1, 2029
Ice rinks including chillers (New)	New refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 150	January 1, 2024
Ice rinks including chillers (Retrofit)	Retrofit refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 750	January 1, 2024

(3) Table 3 in this section lists prohibited substances in new or retrofit air conditioning equipment, as defined in WAC 173-443-030, and the effective date of the prohibition, unless an exemption is provided for in WAC 173-443-050.

**TABLE 3. Prohibited Substances for New or Retrofit Air Conditioning Equipment**

End-Use	Criteria	Prohibited Substances	Effective Date
Room air conditioners and residential dehumidifiers (New)	New air conditioning equipment	Refrigerants with a GWP greater than 750	January 1, 2024
Room air conditioners and residential dehumidifiers (Retrofit)	Retrofit air conditioning equipment	Refrigerants with a GWP greater than 750	January 1, 2029
Other types of air conditioning equipment used in residential and nonresidential applications (New)	New air conditioning equipment	Refrigerants with a GWP greater than 750	January 1, 2026, if UL 60335-2-40 Edition 4 is adopted by the Washington state building code council by December 31, 2023; otherwise 24 months following adoption of the updated code
Other types of air conditioning equipment used in residential and nonresidential applications (Retrofit)	Retrofit air conditioning equipment	Refrigerants with a GWP greater than 750	January 1, 2029
Variable refrigerant flow (VRF) or volume system (New)	New air conditioning equipment	Refrigerants with a GWP greater than 750	January 1, 2026
Variable refrigerant flow (VRF) or volume system (Retrofit)	Retrofit air conditioning equipment	Refrigerants with a GWP greater than 750	January 1, 2029

(4) Table 4 in this section lists prohibited substances in small containers of refrigerant and nonessential consumer products, as the terms are defined in WAC 173-443-030, and the effective date of the prohibition.

**TABLE 4. Prohibited Substances for Small Containers of Refrigerant and Nonessential Consumer Products**

End-Use	Prohibited Substances	Effective Date
Small containers of refrigerant	Substitutes with a GWP greater than 150	July 25, 2021
Nonessential consumer products	Substitutes with a GWP greater than 150	July 25, 2021

AMENDATORY SECTION (Amending WSR 23-24-041, filed 11/30/23, effective 12/31/23)

**WAC 173-443-060 Prohibitions and additional requirements for new products and equipment listed in Table 1.** (1) Prohibitions. No person may sell, offer for sale, lease, rent, install, or otherwise cause to enter into Washington commerce any new product or equipment, as defined in WAC 173-443-030, that contains or uses a prohibited substance listed in WAC 173-443-040, Table 1, unless an exemption is provided for in WAC 173-443-050.

(2) Sell through provisions.

(a) Products and equipment manufactured prior to the effective date of a prohibition in WAC 173-443-040, Table 1, may be sold,

leased, rented, imported, exported, distributed, installed, used, or otherwise introduced into Washington commerce after the date of prohibition.

(b) Polyurethane foam systems manufactured (blended) before the prohibition date and not yet applied on site may be used after the prohibition date.

(3) Other allowances. Except where existing equipment is retrofit, nothing in this chapter requires a person who acquired a product or equipment that contains or uses a prohibited substance prior to the effective date of a prohibition in WAC 173-443-040 to cease use of that product or equipment.

(4) Product labeling and disclosure.

(a) Except as provided in (d) and (e) of this subsection and for products and equipment listed as exempt in WAC 173-443-060, a manufacturer of any new product or equipment listed in Table 1 must disclose the substance(s) contained or used through labeling the product(s) or equipment in accordance with this subsection.

(b) Effective date. The effective date for product labeling and disclosure is January 10, 2021, or one year from the effective date of an applicable prohibition, whichever is later.

(c) Disclosure methods.

(i) A manufacturer of aerosol propellant products must disclose the substance(s) contained or used in such products through one of the following methods:

(A) For aerosol products regulated by the U.S. Consumer Product Safety Commission, the U.S. Food and Drug Administration excluding prescription drug products, or products that are not covered by

(c)(i)(B) of this subsection:

(I) New dedicated label;

(II) On-packaging label;

(III) A label required by another jurisdiction that discloses the substance(s) used or the compliance status of the product; or

(IV) On-product or on-packaging symbol or code; and online disclosure.

(B) For aerosol products regulated by EPA under the Federal Insecticide Fungicide and Rodenticide Act, aerosol products regulated by the Occupational Safety and Health Administration, or aerosol products regulated by the U.S. Food and Drug Administration:

(I) Any option in (c)(ii)(A) through (D) of this subsection; or

(II) A product document, such as a Safety Data Sheet (SDS), that complies with 29 C.F.R. § 1910.1200; and online disclosure if the SDS is not posted online.

(ii) A manufacturer of refrigeration equipment (including refrigeration equipment that contains foam) must disclose the substance(s) contained or used in such equipment through one of the following methods:

(A) For the refrigerant used in household refrigerators and freezers - Compact, and household refrigerators and freezers - Built-in:

(I) New dedicated label;

(II) Underwriters laboratories or equivalent safety label;

(III) A label required by another jurisdiction that discloses the substance(s) used or the compliance status of the equipment; or

(IV) On-product symbol or code; and online disclosure.

(B) For the foam blown in or installed by the manufacturer of household refrigerators and freezers, household refrigerators and

freezers - Compact, and household refrigerators and freezers - Built-in:

- (I) New dedicated label;
  - (II) Underwriters laboratories or equivalent safety label;
  - (III) Owner's manual; or
  - (IV) On-equipment symbol or code; and online disclosure.
- (C) For the refrigerant used in commercial refrigeration equipment:

(I) New dedicated label;

(II) Underwriters laboratories or equivalent safety label;

(III) A label required by another jurisdiction that discloses the substance(s) used or the compliance status of the equipment; or

(IV) On-product symbol or code; and online disclosure.

(D) For the foam blown in or installed by the manufacturer of commercial refrigeration equipment:

- (I) New dedicated label;
- (II) Underwriters laboratories or equivalent safety label;
- (III) Owner's manual; or
- (IV) On-equipment symbol or code; and online disclosure.

(iii) A manufacturer of centrifugal or positive displacement chillers must disclose the substance(s) contained or used in such equipment through one of the following methods:

(A) For the refrigerant used in centrifugal and positive displacement chillers:

- (I) New dedicated label;
- (II) Underwriters laboratories or equivalent safety label;
- (III) A label required by another jurisdiction that discloses the substance(s) used or the compliance status of the equipment; or
- (IV) On-equipment symbol or code; and online disclosure.

(B) For the foam blown in or installed by the manufacturer of centrifugal and positive displacement chillers:

- (I) New dedicated label;
- (II) Underwriters laboratories or equivalent safety label;
- (III) Owner's manual;
- (IV) A label required by another jurisdiction that discloses the substance(s) contained or the compliance status of the equipment; or
- (V) On-product symbol or code; and online disclosure.

(iv) A manufacturer of foam products must disclose the substance(s) contained or used in such products through one of the following methods:

(A) For nonretail foam products, the following methods may be used on a unit or on each individual product within a unit:

- (I) New dedicated label;
- (II) On-packaging label;
- (III) A label required by another jurisdiction that discloses the substance(s) used or the compliance status of the product; or
- (IV) On-product or on-packaging symbol or code; and online disclosure.

(B) For retail foam products:

- (I) New dedicated label;
- (II) On-packaging label;
- (III) A label required by another jurisdiction that discloses the substance(s) used or the compliance status of the product; or
- (IV) On-product or on-packaging symbol or code; and online disclosure.

(C) For the foam blowing agent used in polyurethane foam systems, including spray foam systems:

(I) New dedicated label on the canister or cylinders;  
(II) Existing product label on the canister or cylinders;  
(III) On-packaging label;  
(IV) A label required by another jurisdiction that discloses the substances(s) used or the compliance status of the product;  
(V) On-packaging symbol or code; and online disclosure.  
(v) Online disclosure may occur through online publication of an owner's manual, safety data sheet, or other documentation that provides information about the product to the end-user of the product.  
(d) Alternative disclosure methods.  
(i) A manufacturer may request approval to use an alternative disclosure method in lieu of the labeling options listed in (c) of this subsection by submitting a written statement to ecology. The written statement must:  
(A) Describe the condition(s) or circumstance(s) that make it infeasible to comply with the labeling requirements of this subsection; and  
(B) Propose an alternative disclosure method that satisfactorily communicates the substance(s) used or the compliance status of the product(s) or equipment.  
(ii) Ecology will provide a written response to a manufacturer's request to use an alternative disclosure method by approving or denying the request, or requesting additional information, within 30 days of receipt.  
(iii) Ecology may approve the request if it determines that the use of a label meeting the requirements in (c) of this subsection is not feasible for the particular product(s) or equipment.  
(iv) If ecology approves the request, the effective date of the approval is the date the manufacturer received written confirmation from ecology that its proposed alternative disclosure method may be used to satisfy this subsection.  
(e) The requirements of this subsection do not apply to aircraft and aircraft components subject to certification requirements of the Federal Aviation Administration.  
(5) Manufacturer reporting.  
(a) A manufacturer of a product or equipment that contains or uses prohibited substance(s) as of July 28, 2020, for an end-use listed in Table 1 of this subsection, or a representative of the manufacturer, must report to ecology consistent with (b) and (c) of this subsection.  
(i) It is only necessary for one person to report on behalf of the manufacturer for a particular product or equipment.  
(ii) In the event of a manufacturer's failure to provide a complete, accurate, and timely report, ecology will require the submittal of the information from related persons or entities in the following order:  
(A) The person or entity that manufactured, produced, or assembled the product or equipment, unless that person or entity has no presence in the United States.  
(B) The person or entity that marketed the product or equipment under its name or trademark, unless that person or entity has no presence in the United States.  
(C) The first person or entity, whether an importer or a distributor, that owned the product or equipment in the United States.  
(iii) This subsection in no way limits the liability of any manufacturer, as defined in WAC 173-443-030, associated with the product or equipment from enforcement under chapter 70A.15 RCW.

(b) Initial status notification.

(i) By December 31, 2019, a manufacturer or its representative must provide ecology an initial status notification of the status of all products and equipment within each applicable end-use that contains or uses any prohibited substance(s) listed in WAC 173-443-040, Table 1.

(ii) An initial status notification must include all covered products and equipment that the manufacturer offers for sale, leases, rents, installs, or otherwise causes to enter into Washington commerce.

(iii) A manufacturer must submit an annual status notification using ecology's notification form. The current form is available on ecology's website. This initial status notification must provide:

(A) Contact information for the manufacturer;

(B) The name of the person authorized to represent the manufacturer for purposes of providing initial status notifications and status updates;

(C) All products and equipment within each applicable end-use;

(D) Which HFCs or other prohibited substance(s) are being used within each applicable end-use; and

(E) Signature and certification by the authorized representative for the manufacturer.

(c) Updated status notifications.

(i) Within 120 days after the effective date of a prohibition set forth in WAC 173-443-040, a manufacturer affected by the prohibition must provide ecology with an updated status notification using ecology's form.

(ii) Within 120 days of a manufacturer's introduction into Washington commerce of a new or modified product or equipment that contains or uses a prohibited substance(s) listed in WAC 173-443-040, the manufacturer must provide ecology with an updated status notification using ecology's form.

(iii) The updated status notification required by (c)(i) and (ii) of this subsection must include:

(A) Whether the manufacturer has ceased use of the prohibited substance(s) listed in WAC 173-443-040 for each applicable product(s) or equipment within each end-use;

(B) What, if any, prohibited substance(s) remain in use; and

(C) Updated responses on all information requested in the initial status notification required in (b) of this subsection.

AMENDATORY SECTION (Amending WSR 23-24-041, filed 11/30/23, effective 12/31/23)

**WAC 173-443-065 Prohibitions and additional requirements for new or retrofit refrigeration equipment listed in Table 2.** (1) Prohibitions. No person shall sell, offer for sale, lease, rent, install, or otherwise cause to enter into Washington commerce any new refrigeration equipment that contains or uses a prohibited substance listed in WAC 173-443-040, Table 2, unless an exemption is provided for in WAC 173-443-050.

(2) ~~Sell through provision. ((Refrigeration equipment that is manufactured prior to January 1, 2024, may be sold, leased, rented,~~

~~installed, or otherwise introduced into Washington commerce until January 1, 2026.)~~)

~~(a) Effective two years after the dates listed in WAC 173-443-040, Table 2, no person may:~~

~~(i) Sell, distribute, offer for sale or distribution, or attempt to purchase or receive for sale or distribution any new refrigeration equipment manufactured prior to the effective date that contains or uses a prohibited substance listed in WAC 173-443-040, Table 2; or~~

~~(ii) Install any new refrigeration equipment manufactured prior to the effective date that contains or uses a prohibited substance listed in WAC 173-443-040, Table 2.~~

~~(b) Equipment manufactured prior to the effective date of the prohibition in WAC 173-443-040, Table 2, may be leased or rented after the effective date of the prohibition.~~

(3) Labeling and disclosure. Beginning one year from the effective date of this chapter, a manufacturer of new refrigeration equipment that is intended for sale or other entry into Washington commerce, must disclose the substance(s) contained or used in its equipment by labeling the equipment in accordance with this subsection. For field-charged or field-erected equipment, this labeling must be completed by the equipment installer at the time of installation.

(a) The following information must be disclosed in the form of an on-product label:

(i) Chemical name, or American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) designation, of the substance(s) used or contained in the equipment;

(ii) The GWP, labeled as "global warming potential," of the substance(s) used or contained in the equipment;

(iii) The date of manufacture, or at a minimum, the year of manufacture. For field charged or field erected equipment, this is the date of first charge; and

(iv) Full refrigerant charge size in ounces, pounds, or kilograms.

(b) Existing labels meeting the above requirements may be used.

(4) Recordkeeping. As of the effective date of this chapter, a manufacturer of any new or retrofit refrigeration equipment must maintain for a minimum of five years, and make available upon request by ecology, a copy of the following records:

(a) Sector or subsector of the equipment;

(b) Refrigerant type the equipment is designed to use;

(c) Date of manufacture or import;

(d) Name of company or entity to whom the equipment was sold or otherwise distributed;

(e) The bill of lading; and

(f) The invoice.

AMENDATORY SECTION (Amending WSR 23-24-041, filed 11/30/23, effective 12/31/23)

**WAC 173-443-075 Prohibitions and additional requirements for new or retrofit air conditioning equipment listed in Table 3.** (1) Prohibitions. No person shall sell, offer for sale, lease, rent, install, or ~~((other))~~ otherwise cause to enter into Washington commerce any new air conditioning equipment that contains or uses a prohibited sub-

stance listed in WAC 173-443-040, Table 3, unless an exemption is provided for in WAC 173-443-050.

(2) ~~Sell through provision. ((Air conditioning equipment that is manufactured prior to January 1, 2024, may be sold, leased, rented, installed, or otherwise introduced into Washington commerce until January 1, 2026.))~~

(a) Effective two years after the dates listed in WAC 173-443-040, Table 3, no person may:

(i) Sell, distribute, or offer for sale or distribution, or attempt to purchase or receive for sale or distribution any new air conditioning equipment that contains or uses a prohibited substance listed in WAC 173-443-040, Table 3;

(ii) Install any new air conditioning equipment manufactured prior to the effective date that contains or uses a prohibited substance listed in WAC 173-443-040, Table 3; or

(iii) Install any new variable refrigerant flow air conditioning system with components manufactured prior to the effective date that contains or uses a prohibited substance listed in WAC 173-443-040, Table 3.

(b) Equipment manufactured prior to the effective date of the prohibition in WAC 173-443-040, Table 3, may be leased or rented after the effective date of the prohibition.

(3) Labeling and disclosure. Beginning one year from the effective date of this chapter, a manufacturer of any new air conditioning equipment that is intended for sale or other entry into Washington commerce, must disclose the substance(s) contained or used in its equipment by labeling the equipment in accordance with this subsection. For field-charged or field-erected equipment, this labeling must be completed by the equipment installer, as the manufacturer, at the time of installation.

(a) The following information must be disclosed in the form of an on-product label:

(i) Chemical name, or American Society of Heating and Air Conditioning Engineers (ASHRAE) designation, of the substance(s) used or contained in the equipment;

(ii) The GWP, labeled as "global warming potential," of the substance(s) used or contained in the equipment;

(iii) Date of manufacture or import. For field-erected or field-charged equipment, this is the date of first charge; and

(iv) Refrigerant charge size in ounces, pounds, or kilograms.

(b) Existing labels meeting the above requirements may be used.

(4) Recordkeeping. As of the effective date of this chapter, a manufacturer of any new or retrofit air conditioning equipment, as defined in WAC 173-443-030, must maintain for a minimum of five years, and make available upon request by ecology, a copy of the following records:

(a) The sector or subsector of the equipment;

(b) Refrigerant type the equipment is designed to use and its GWP value;

(c) Date of manufacture or import;

(d) Model and serial number;

(e) Name of company or retailer to whom the equipment was sold or otherwise distributed;

(f) The bill of lading; and

(g) The invoice.

**WAC 173-443-095 Variances.** (1) An applicant may apply to ecology for a variance from the prohibitions of WAC 173-443-040, Table 2 or Table 3. Ecology may grant a variance if it determines that the request meets the conditions identified in subsection (2) of this section and the applicant has complied with subsection (3) of this section.

(2) Types of variances.

(a) Impossibility. Ecology may grant a variance if the applicant demonstrates that the requested exemption will not increase the overall risk to human health or the environment and all of the following apply:

(i) A substance that complies with the applicable threshold is not currently or potentially available; and

(ii) The applicant has made a good faith effort to anticipate, address, and mitigate any potential noncompliance.

(b) Force majeure. Ecology may grant a variance if the applicant demonstrates that the requested exemption will not increase the overall risk to human health or the environment and all of the following apply:

(i) The applicant cannot comply with the applicable prohibitions due to a force majeure event; and

(ii) The applicant has made a good faith effort to anticipate, address, and mitigate the impacts of any force majeure event.

(c) Economic hardship. Ecology may grant a variance if the applicant demonstrates that the requested exemption will not increase the overall risk to human health or the environment and all of the following apply:

(i) The applicant owns or operates a retail food facility or a small business, as defined in WAC 173-443-030;

(ii) Compliance with the applicable prohibitions would result in closure of the entire retail food facility or small business, or a large portion thereof, or a substantial loss of revenue from the retail food facility or small business; and

(iii) The applicant has made a good faith effort to anticipate, address, and mitigate any potential noncompliance.

(3) Application process. To apply for a variance, the applicant must submit an application that meets the requirements of (a) through (i) of this subsection:

(a) Applicant name, ownership status, address, telephone number, and email address;

(b) Description of business activity or product description;

(c) The specific prohibition(s) for which a variance is requested;

(d) An explanation of the reasons for seeking a variance;

(e) Evidence demonstrating how the variance request meets the criteria identified in subsection (2)(a) or (b) or (c) of this section;

(f) Length of variance requested and the earliest date when compliance can be achieved;

(g) A description of the damage or harm that will result from having to comply with the applicable prohibition(s) within the required time frame;

(h) A proposed compliance plan describing how and when compliance with the applicable prohibition(s) will be achieved after the variance is granted. The compliance plan must include all of the following:

- (i) The method(s) by which compliance will be achieved;
- (ii) Milestone achievements;
- (iii) Milestone dates; and

(iv) A proposed mitigation plan that demonstrates how the applicant will reduce greenhouse gas emissions while the variance is in place. The mitigation plan must include all calculations used to determine emissions estimates.

(i) The application must be submitted in writing to either of the following addresses:

Ecology ((~~Air Quality~~) Climate Pollution Reduction Program)

((~~HFC Program~~) Fluorinated Gases Section)

P.O. Box 47600

Olympia, WA 98504-7600; or

By email to: ((~~HFC@ecology.wa.gov~~ [HFC@ecy.wa.gov]))

HFC@ecy.wa.gov

(4) Approval and disapproval process.

(a) Ecology will determine whether the variance application is complete and will notify the applicant of its completeness determination within 30 days of receipt of the application. Only complete applications will be considered.

(b) Within 60 days of determining that a variance application is complete, ecology will notify the applicant of the decision in writing, and if approved, will specify the terms and conditions of the variance in a letter to the applicant. The applicant and ecology may mutually agree to a longer time period for ecology's review period.

(c) During the review period, ecology may request, and the applicant must provide, more information as needed to reach a decision.

(d) Ecology will grant a variance only to the applicant. The variance is not transferable.

(e) Ecology will not approve a variance retroactively to any date prior to receipt of the application.

(f) An applicant adversely affected by ecology's denial of a variance or by the terms and conditions of an approved variance may appeal ecology's decision to the pollution control hearings board pursuant to chapter 43.21B RCW.

(5) Failure to comply with the terms and conditions of an approved variance.

(a) An applicant must comply with the terms and conditions of an approved variance to maintain its approved status.

(b) Ecology may revoke or modify the variance approval if it determines that an applicant no longer meets the criteria specified in the variance approval letter.

(c) An applicant adversely affected by an ecology decision to revoke or modify an approved variance may appeal ecology's decision to the pollution control hearings board pursuant to chapter 43.21B RCW.

**WAC 173-443-125 Registration requirements for refrigerant wholesalers, distributors, and reclaimers.** (1) (~~By March 15, 2024,~~) A refrigerant wholesaler, distributor, or reclaimer that sells, supplies, distributes, or reclaims any amount of a refrigerant with a GWP of 150 or more in Washington for any purpose, other than those listed in subsection (2) of this section, must register with ecology by providing the information specified in subsection (3) of this section as follows:

(a) By March 15, 2024, for wholesaler, distributor, reclaimer that begin operations on or before January 1, 2024; or

(b) By March 15th of the calendar year after the year in which the wholesaler, distributor, reclaimer begins operations after January 1, 2024.

(2) This section does not apply to the sale, supply, distribution, or reclamation of refrigerants for the sole purpose of either:

(a) Selling to a refrigerant distributor or wholesaler for eventual resale; or

(b) Providing to a person for reclamation or destruction.

(3) (a) Registration information. A refrigerant wholesaler, distributor, or reclaimer must provide the following information to ecology through the Washington RMP reporting system:

(b) Facility information:

(i) Name of facility;

(ii) Name of owner(s);

(iii) North American Industry Classification (NAICS) code;

(iv) Facility mailing address, including street address, city, state, and zip code;

(v) Facility physical address, including street address, city, state, and zip code;

(vi) Facility contact person;

(vii) Facility contact person's phone number and email address;

(viii) Name and physical address of each wholesale, distribution, or reclaim facility under the registrant's operational control; and

(ix) Name and email address of contact person for each wholesale, distribution, or reclaim facility under the registrant's operational control.

(4) Change of ownership. Prior to any change of ownership of an entity that has been registered pursuant to this section, the seller must ensure all of the following are completed:

(a) The facility must be registered in accordance with this section;

(b) The seller must inform the prospective buyer of the registration requirements of this section; and

(c) The seller must submit a change of ownership notification to ecology that includes all of the following:

(i) Seller information:

(A) Name of facility;

(B) Facility identification number; as it appears in the WA RMP data reporting system; and

(C) Name of person selling the facility;

(ii) Prospective buyer information:

(A) Name of person(s) buying the facility;

- (B) Facility mailing address including a street address, city, state, and zip code;
- (C) Facility contact person; and
- (D) Facility contact person's phone number and email address.

AMENDATORY SECTION (Amending WSR 23-24-041, filed 11/30/23, effective 12/31/23)

**WAC 173-443-235 Exemptions.** (1) The owner or operator of a facility that has a refrigeration or air conditioning system may apply to ecology for an exemption from the requirements of WAC 173-443-165 or 173-443-175. Ecology may grant an exemption if it determines the request meets the conditions identified in subsection (2) of this section and the applicant has complied with subsection (3) of this section.

(2) Types of exemptions.

(a) Impossibility. Ecology may grant an exemption if the applicant provides clear and convincing documentation that the requested exemption will not increase the overall risk to human health or the environment and that at least one of the following criteria is met:

(i) The component(s) or parts needed to complete a leak repair are not currently or potentially available; or

(ii) The applicant has made a good faith effort to repair all identified leaks in accordance with WAC 173-443-165 and to operate and maintain the system in accordance with manufacturer recommendations.

(b) Force majeure. Ecology may grant an exemption if the applicant provides clear and convincing documentation that the requested exemption will not increase the overall risk to human health or the environment and that all of the following criteria are met:

(i) The applicant cannot comply with the applicable requirements due to a force majeure event; and

(ii) The applicant has made a good faith effort to anticipate, address, and mitigate the impacts of any force majeure event.

(c) Economic hardship. Ecology may grant an exemption if the applicant provides clear and convincing documentation that the requested exemption will not increase the overall risk to human health or the environment and that all of the following criteria are met:

(i) The facility is a retail food facility or a small business, as defined in WAC 173-443-030;

(ii) Compliance with the applicable requirements would result in extreme financial hardship such as the closure of the facility or a substantial loss of revenue from the facility; and

(iii) The applicant has made a good faith effort to anticipate, address, and mitigate any potential noncompliance.

(3) Application process.

(a) Applicant. If the facility's owner(s) and operator(s) are different persons or entities, the application for an exemption must be submitted by the operator(s) and must include an attestation signed by the owner(s) indicating they have reviewed and verified the accuracy of the information contained in the application.

(b) To apply for an exemption, the applicant must submit an application that meets the requirements of (b)(i) through (vii) of this subsection:

(i) Applicant contact information:

(A) Name of facility;  
(B) Facility owner(s);  
(C) Facility operator(s), if different than the owner;  
(D) Type of business or business activity;  
(E) Facility address, including street address, city, state, and zip code;

(F) Facility contact phone number and email address;

(ii) The specific requirement(s) for which an exemption is requested;

(iii) An explanation of the reasons for seeking an exemption;

(iv) Documentation that the criteria for one or more of the types of exemptions set forth in subsection (2)(a) or (b) or (c) of this section is met;

(v) Length of time for which the exemption is requested and the earliest date when compliance can be achieved;

(vi) A description of the damage or harm that will result from having to comply with the applicable requirements within the required time frame; and

(vii) A proposed compliance plan describing how and when compliance with the applicable requirements will be achieved if the exemption is granted. The compliance plan must include all of the following:

(A) The method(s) by which compliance will be achieved;

(B) Milestone achievements;

(C) Milestone dates; and

(D) A proposed mitigation plan that demonstrates how the applicant will reduce greenhouse gas emissions while the exemption is in place. The mitigation plan must include all calculations used to determine emissions estimates.

(c) The application must be submitted in writing to either of the following addresses:

Ecology ((~~Air Quality~~)) Climate Pollution Reduction Program

((~~HFC Program~~)) Fluorinated Gases Section

P.O. Box 47600

Olympia, WA 98504-7600; or

By email to: ((~~HFC@ecology.wa.gov~~ [HFC@ecy.wa.gov]))

HFC@ecy.wa.gov

(4) Approval and disapproval process.

(a) Ecology will determine whether the exemption application is complete and will notify the applicant of its completeness determination within 30 days of receipt of the application. Only complete applications will be considered.

(b) Within 60 days of determining that the application is complete, ecology will determine if and under what conditions the exemption will be permitted. The applicant and ecology may mutually agree to a longer time period for ecology's review and evaluation.

(c) During the review period, ecology may request, and the applicant must provide, more information, if necessary, to reach a decision.

(d) Ecology will notify the applicant of the decision in writing, and if approved, will specify the terms and conditions of the exemption in a letter to the applicant. Such terms and conditions may include a requirement that best management practices be followed or that mitigation measures identified in the applicant's proposed compliance plan be implemented.

(e) Ecology will grant an exemption only to the applicant who applied for the exemption. The exemption is not transferable.

(f) Ecology will not approve an exemption retroactively prior to receipt of the application.

(g) An applicant adversely affected by a denial of an exemption or by the terms and conditions of an approved exemption, may appeal ecology's decision to the pollution control hearings board pursuant to chapter 43.21B RCW.

(5) Failure to comply with the terms of an approved exemption.

(a) The applicant must comply with the terms and conditions of an approved exemption to maintain its approved status.

(b) Ecology may revoke or modify an exemption approval if it determines the applicant no longer meets the criteria specified in the exemption approval letter.

(c) An applicant adversely affected by an ecology decision to revoke or modify an approved exemption may appeal ecology's decision to the pollution control hearings board pursuant to chapter 43.21B RCW.