Chapter 173-443 WAC

HYDROFLUOROCARBONS (HFCs) AND OTHER FLUORINATED GREENHOUSE GASES

WAC 173-443-010 Policy and purpose.

(1) Ecology's policy under chapters 70A.15 and 43.21A RCW is to provide for the systematic control of air pollution from air contaminant sources. Ecology's policy under chapter 70A.60 RCW is to reduce the emissions of HFCs and other fluorinated greenhouse gases.

(2) This chapter establishes requirements for the transition to less damaging refrigerants in the air conditioning and refrigeration, aerosol propellant, and foam end-use categories in Washington in a manner similar to rules adopted under EPA's Significant New Alternative Policy (SNAP) program and refrigerant management regulations and HFC rules adopted by other states around the country (RCW 70A.60.005).

WAC 173-443-020 Applicability.

(1) The requirements of this chapter apply to:

(a) A person who offers for sale, leases, rents, installs, or otherwise causes to enter into Washington commerce any product or equipment that contains or uses a regulated refrigerant, HFC, or other substitute for an end-use listed in WAC 173-443-040;

(b) A person who owns or operates a stationary refrigeration or air conditioning system, as defined in WAC 173-443-030;

(c) A person who installs, repairs, maintains, services, replaces, or disposes of a stationary refrigeration or air conditioning system, as defined in WAC 173-443-030; and

(d) A person who distributes, reclaims, or recycles a refrigerant with a high global warming potential (GWP).

WAC 173-443-030 Definitions and acronyms.

"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 conditioned space by controlling its temperature, humidity, cleanliness, or distribution. Air conditioning includes chillers except for purposes of applying a maximum GWP threshold for new equipment under WAC 173-443-040, and heat pumps. Air conditioning also includes, but is not limited to room air conditioning, such as window units, packaged terminal air conditioners, packaged terminal heat pumps, residential dehumidifiers and portable air conditioners; ducted central air conditioners and heat pumps; non-ducted air conditioners and heat pumps (both mini and multi-split); packaged roof top units; water source and ground source heat pumps; and other dehumidifiers. Air conditioning equipment also includes computer room and data center cooling and remote condensing units used for comfort cooling. Air conditioning applies to stationary

equipment and does not apply to mobile air conditioning, including those used in motor vehicles, rail and trains, aircraft, watercraft, recreational vehicles, recreational trailers, and campers.

“Applicant” means:

(a) Any person who sells, leases, rents, installs, uses, or otherwise enters into Washington commerce any substance in end-uses listed in WAC 173-443-040(2) or (3) who applies for a variance under WAC 173-443-080; or

(a) Any person who owns or operates a stationary refrigeration or air conditioning system who applies for an exemption under WAC 173-443-160.

"Automatic leak detection system” means a calibrated device using continuous monitoring for detecting leakage of refrigerants that on detection, alerts the operator, and may be either:

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

(b) An indirect system that automatically interprets measurements (e.g., temperature or pressure) within a refrigeration system that indicate 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 Centigrade.

“Capital cost” means 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" means air conditioning equipment that utilizes a centrifugal compressor in a vapor-compression refrigeration cycle typically used for commercial comfort air conditioning. Under this definition, a centrifugal chiller is a chiller intended for comfort cooling and does not include chillers for industrial process cooling and refrigeration.

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

"Certified refrigerant recovery or recycling equipment” means any refrigerant recovery or recycling equipment that meets the standards specified 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 a transfer of the title of a facility 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, 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. 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”

"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 appliances 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 appliances include but are not limited to chillers, commercial split systems, and packaged roof-top units. (40 C.F.R. 82.152)

“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.

"Component" means a part of a refrigeration 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:

(1) For air conditioning and refrigeration equipment, the date the manufacturer affixed an equipment label indicating the equipment’s date of manufacture;

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

(3) 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 substitutes 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.

"Existing product label" means a label adhered or attached to a product, such as a nameplate or sticker, or to the box or packaging enclosing the product that discloses the refrigerant contained or used in the product.

"F" means Fahrenheit.

“Facility identification number” means a unique identification number provided by ecology for each facility with one or more refrigeration systems in operation pursuant to WAC 173-443-105.

"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.

“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 perform which is unrelated to the event as described in this section.

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

(1) Use of the equipment manufacturer’s specifications of the full charge;

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

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

(4) 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 173-443-040, 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.

"HFC" means hydrofluorocarbon as the term is defined in RCW 70A.60.010.

“High-GWP refrigerant” means a compound used as a heat transfer fluid or gas that is:

(1) A chlorofluorocarbon, hydrochlorofluorocarbon, hydrofluorocarbon, perfluorocarbon, or any compound or blend of compounds with a GWP value equal to or greater than 150; or

(2) A regulated refrigerant as defined in WAC 173-443-030.

"Household refrigerators and freezers" means refrigerators, refrigerator-freezers, freezers, and miscellaneous household refrigeration appliances 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 twenty-four 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 process streams at a specific location in manufacturing and other forms of industrial processes and applications. These complex, customized systems are directly linked to the industrial process. 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 one appliance is used for both industrial process refrigeration and other applications, it will be considered industrial process refrigeration if 50 percent or more of its operating capacity is used for industrial process refrigeration.

"Initial verification test” means a leak test conducted as soon as practicable after the repair is completed. “Initial verification test” with regard to leak repairs that require evacuation of the refrigeration or air conditioning system means a test conducted prior to the replacement of the full charge and before the system has reached operation at normal characteristics and conditions.

"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 (or over the period that has passed since the last successful verification test showing all identified leaks were repaired if that period is less than one year);

(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.

“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 degrees Fahrenheit (0 degrees Celsius).

“Medium temperature refrigeration system” means a commercial or industrial process refrigeration systems that maintains food, beverages, or other items at temperatures above 32 degrees Fahrenheit (0 degrees Celsius).

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

"Manufacturer" means 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 (RCW 70A.60.010).

"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 product" or "new equipment" means products or equipment listed in WAC 173-443-040, Table 1, that are one or more of the following:

(a) Manufactured after January 10, 2021;

(b) First installed with new or used components, or expanded by the addition of components to increase capacity after January 10, 2021; or

(c) Replaced or cumulative replaced after January 10, 2021, such that the capital cost of replacement exceeds 50 percent of the capital cost of replacing the whole system.

"New stationary air conditioning equipment" means any air conditioning equipment or system 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 that is one of the following:

(a) New construction in a new 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 and/or more than one evaporator that is:

(i) Retrofit, as defined in WAC 173-443-030; or

(ii) Modified such that the system undergoes cumulative replacements 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 stationary refrigeration equipment" means any refrigeration equipment or system 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 that is one of the following:

(a) New construction in a new facility;

(b) An addition or modification that increases the nomimal compressor capacity of a system in an existing facility;

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

(d) A system in an existing facility used for commercial refrigeration or industrial process refrigeration that is:

(a) Retrofit, as defined in WAC 173-443-030; or

(b) Modified such that the system undergoes cumulative replacements 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 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.

"Online disclosure" means disclosing the substitute 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 non-residential air-conditioning equipment or air-conditioning system not otherwise defined as room air conditioner, wall air conditioner, window air conditioner, packaged terminal air conditioner (PTAC), packaged terminal heat pump (PTHP), portable air conditioner, residential dehumidifier, or variable refrigerant flow (VRF) system.

“Other refrigeration” or “other refrigeration equipment” means any stationary, non-residential refrigeration equipment that is used for an application other than retail food, 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, cold storage, ice rinks, industrial process refrigeration, commercial refrigeration, or air conditioning.

"Owner's manual" means a paper or online instructional book that is available for an end-use product, which provides basic information about the product.

“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. It 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.

"PSI" means pounds per square inch.

"Person" means an individual, partnership, franchise holder, association, corporation, a state, a city, a county, or any subdivision or instrumentality of the state (RCW 70A.60. 010).

"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," "room air conditioner," or "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.

"Positive displacement chiller" means vapor compression cycle chillers that use positive displacement compressors, typically used for commercial comfort air conditioning. Positive displacement chiller in this definition is a chiller intended for comfort cooling and does not include cooling for industrial process cooling and refrigeration.

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

"Refrigerant" or "refrigerant gas" means any substance, including blends and mixtures, which is used for heat transfer purposes and provides a cooling or warming 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" means any stationary device that is designed to contain and use refrigerant. "Refrigeration equipment" 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 (RCW 70A.60.010).

"Regulated refrigerant" means a class I or class II substance as listed in Title VI of section 602 of the federal clean act amendments of November 15, 1990 (RCW 70A.60.010).

"Remote condensing unit" means retail 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.

"Residential dehumidifier" means a residential air-conditioning product, other than a portable air conditioner, room air conditioner, or packaged terminal 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" or "commercial 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, and cold storage warehouses.

"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 (RCW 70A.60.010).

"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.

“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 fifty or fewer employees (RCW 19.85.020).

“Small container” means a container having more than two ounces and less than two pounds of a regulated refrigerant or substitute 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.

“Substance” means any chemical, product substitute or alternative manufacturing process, whether new or retrofit, intended for use in an end-use listed in Tables 1, 2, 3, and 4 in WAC 174-443-040 (1) through 173-443-040(4).

"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 twelve 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 ninety days each year.

"Substitute" means a chemical, product substitute, or alternative manufacturing process, whether existing or new, that is used to perform 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 (RCW 70A.60.010).

"Sufficient disclosure" means providing the name of the substitute or a compliance disclosure statement or providing alternative disclosure that meets the conditions of WAC 173-443-060(5).

"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.

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

"Very low temperature refrigeration or cooling" means a refrigeration or cooling system that maintains temperatures below -58 degrees Fahrenheit (-50 degrees Celsius), including, but not limited to, medical and laboratory freezers, specialized industrial process cooling applications, and extreme temperature environmental testing.

WAC 173-443-040 List of prohibited substances.

(1) Table 1 in this section lists substances prohibited in the refrigeration, air conditioning, aerosol propellant, and foam end-uses and the effective date of prohibition, unless an exemption is provided for in WAC 173-443-050.

TABLE 1. New refrigeration, air conditioning, aerosol propellants, and foams

End-Use Category: Aerosol Propellants		
End-Use	**Prohibited Substances**	**Effective Date**
Aerosol propellants	HFC-125, HFC-134a, HFC-227ea and blends of HFC-227ea and HFC-134a	January 1, 2020
End-Use Category: Air Conditioning		
End-Use	**Prohibited Substances**	**Effective Date**
Centrifugal chillers (new)	FOR12A, FOR12B, HFC-134a, HFC-227ea, HFC-236fa, HFC-245fa, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, 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 (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
End-Use Category: Refrigeration		
End-Use	**Prohibited Substances**	**Effective Date**
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
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 (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 (new)	HFC-227ea, R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	January 1, 2020
Stand-alone units (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
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
End-Use Category: Foams		
End-Use	**Prohibited Substances**	**Effective Date**
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
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 additional prohibitions for new stationary refrigeration equipment, as defined in WAC 173-443-030, that requires more than 50 pounds of refrigerant to maintain a full charge, unless an exemption is provided for in WAC 173-443-050.

TABLE 2. New stationary refrigeration equipment

End-Use	Criteria	Prohibited Substances	Effective Date
Retail food refrigeration (New facilities and existing facilities installing a retrofit)	New refrigeration equipment containing more than 50 pounds of refrigerant	Refrigerants with a GWP of 150 or more	January 1, 2025
Cold storage warehouses (New facilities and existing facilities installing a retrofit)	New refrigeration equipment containing more than 50 pounds of refrigerant	Refrigerants with a GWP of 150 or more	January 1, 2025
Industrial process refrigeration excluding chillers (New facilities and existing facilities installing a retrofit)	New refrigeration equipment containing more than 50 pounds of refrigerant	Refrigerants with a GWP of 150 or more	January 1, 2025
Chillers used for industrial process refrigeration (New facilities and existing facilities installing a retrofit)	New refrigeration equipment containing more than 50 pounds of refrigerant	Refrigerants with a GWP of 750 or more	January 1, 2025
Ice rinks (New facilities)	New refrigeration equipment containing more than 50 pounds of refrigerant	Refrigerants with a GWP of 150 or more	January 1, 2024
Ice rinks (Existing facilities installing a retrofit)	New refrigeration equipment containing more than 50 pounds of refrigerant	Refrigerants with a GWP of 750 or more	January 1, 2024

(3) Table 3 in this section lists additional prohibitions for new stationary air conditioning equipment and the effective date of prohibition, unless an exemption is provided for in WAC 173-443-050.

TABLE 3. New stationary air conditioning equipment

End-Use	Criteria	Prohibited Substances	Effective Date
Room/wall/window air conditioning equipment, PTAC/PTHPs, portable air conditioning equipment, and residential dehumidifiers (New facilities and existing facilities installing a retrofit)	New air conditioning equipment	Refrigerants with a GWP of 750 or more	January 1, 2024
Other types of air conditioning equipment used in residential and nonresidential applications (New facilities and existing facilities installing a retrofit)	New air conditioning equipment	Refrigerants with a GWP of 750 or more	January 1, 2026 *(date may change)*

End-Use	Criteria	Prohibited Substances	Effective Date
Variable refrigerant flow (VRF) or volume system (New facilities and existing facilities installing a retrofit)	New air conditioning equipment	Refrigerants with a GWP of 750 or more	January 1, 2026 *(date may change)*

(4) Table 4 in this section lists prohibitions for small cans of automotive refrigerant and nonessential consumer products and the effective date of prohibition, unless an exemption is provided for in WAC 173-443-050.

TABLE 4. Refrigerant recharge containers and nonessential consumer products

End-Use	Prohibited Substances	Effective Date
Small containers of refrigerant (less than two pounds) designed for consumer recharge of a motor vehicle air conditioning system or consumer appliance	Refrigerants with a GWP of 150 or more	July 25, 2021
Nonessential consumer products	Refrigerants with a GWP of 150 or more	July 25, 2021

WAC 173-443-050 Exemptions applicable to WAC 173-443-040.

(1) Table 1 in this section lists exemptions to the prohibitions in WAC 173-443-040, Table 1.

TABLE 1. New refrigeration and air conditioning, aerosol propellants, and foams exemptions

End-Use Category	Prohibited Substances	Exemptions
Aerosol propellants	HFC-134a	Cleaning products for removal of grease; Flux and other soils from electrical equipment; Refrigerant flushes; products for sensitivity testing of smoke detectors; Lubricants and freeze sprays for electrical equipment or electronics; Sprays for aircraft maintenance; Sprays containing corrosion preventive compounds used in the maintenance of aircraft, electrical equipment or electronics, or military equipment; Pesticides for use near electrical wires, in aircraft, in total release insecticide foggers, or in certified organic use pesticides for which EPA has specifically disallowed all other lower-GWP propellants; Mold release agents and mold cleaners;

End-Use Category	Prohibited Substances	Exemptions
		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; Products for removing bandage adhesives from skin; Bear spray; and Pepper spray.
Aerosol propellants	HFC-227ea and blends of HFC-227ea and HFC-134a	FDA-approved MDIs for medical purposes.
Air conditioning: Centrifugal chillers Positive displacement chillers	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: Centrifugal chillers Positive displacement chillers	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 spray foam	All substitutes	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; and 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 two-component spray foam	All substitutes	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.

(2) Table 2 in this section lists exemptions to the new stationary refrigeration end-use prohibitions in WAC 173-443-040, Table 2.

TABLE 2. New stationary refrigeration equipment exemptions.

End-Use	Prohibited Substances	Exemptions
Retail food refrigeration	Refrigerants with a GWP of 150 or more	Equipment with 50 pounds or less of refrigerant; Commercial ice machines with more than 500 grams of refrigerant; Replacement of a refrigeration component in an existing facility as part of normal maintenance provided the result does not meet any of the criteria of "new refrigeration equipment" as defined in WAC 173-443-030; and Facilities with new refrigeration equipment with an approved building permit before the effective date of this chapter.
Cold storage warehouses	Refrigerants with a GWP of 150 or more	Equipment with 50 pounds or less of refrigerant; Replacement of a refrigeration component in an existing facility as part of normal maintenance provided the result does not meet any of the criteria of "new refrigeration equipment" as defined in WAC 173-443-030; and Facilities with new refrigeration equipment with an approved building permit before the effective date of this chapter.
Industrial process refrigeration, excluding chillers	Refrigerants with a GWP of 150 or more	Equipment with 50 pounds or less of refrigerant; Replacement of a refrigeration component in an existing facility as part of normal maintenance provided the result does not meet any of the criteria of "new air refrigeration conditioning equipment" as defined in WAC 173-443-030; and Very low temperature (VLT) refrigeration or cooling uses; and

End-Use	Prohibited Substances	Exemptions
		Facilities with new refrigeration equipment with an approved building permit before the effective date of this chapter.
Chillers used for industrial process refrigeration	Refrigerants with a GWP of 150 or more	Equipment with 50 pounds or less of refrigerant; Replacement of a refrigeration component in an existing facility as part of normal maintenance provided the result does not meet any of the criteria of "new refrigeration equipment" as defined in WAC 173-443-030; Very low temperature (VLT) refrigeration or cooling uses; and Facilities with new refrigeration equipment with an approved building permit before the effective date of this chapter.

(3) Table 3 in this section lists exemptions to the new stationary air conditioning end-use prohibitions in WAC 173-443-040, Table 3.

TABLE 3. New stationary air conditioning equipment exemptions

End-Use	Prohibited Substances	Exemptions
Room/wall/window air conditioning equipment, PTACs, PTHP, portable air conditioning equipment, and residential dehumidifiers	Refrigerants with a GWP of 750 or more	Facilities with new refrigeration equipment with an approved building permit before the effective date of this chapter.
Variable refrigerant flow (VRF) or volume system	Refrigerants with a GWP of 750 or more	Facilities with new refrigeration equipment with an approved building permit before the effective date of this chapter.
Other types of air conditioning equipment used in residential and nonresidential applications	Refrigerants with a GWP of 750 or more	Facilities with new refrigeration equipment with an approved building permit before the effective date of this chapter.

WAC 173-443-060 Requirements applicable to refrigeration and air conditioning, aerosol propellants, and foam end-uses listed in WAC 173-443-040, Table 1.

(1) Prohibitions. No person may offer for sale, lease, rent, install, or otherwise cause to enter into Washington commerce any product or equipment that contains or uses HFCs or other

substitutes prohibited for an end-use 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 applicable effective date of a prohibition in WAC 173-443-040 may be sold, leased, rented, imported, exported, distributed, installed, used, or otherwise introduced into Washington commerce after the date of prohibition.

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

(3) Other allowances. Except where an existing system is retrofit, nothing in this chapter requires a person that acquired a product or equipment containing or using a prohibited substitute 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 for products and equipment that use prohibited substitutes for an exempt use listed in WAC 173-443-050, a manufacturer must disclose the substitutes contained or used in its products or equipment applicable to the end-uses listed in WAC 173-443-040, Table 1.

(b) This disclosure must occur no later than one year following an applicable prohibition date, or no later than January 10, 2021, whichever is later.

(c) A manufacturer of aerosol propellant products must disclose the substitutes through one of following methods:

(i) 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 subsection (ii) of this section:

(A) New dedicated label;

(B) Existing product label;

(C) On-packaging label;

(D) A label required by another jurisdiction that discloses the compliance status of the product;

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

(F) On-packaging symbol or code; and online disclosure.

(ii) 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 prescription drug products regulated by the U.S. Food and Drug Administration:

(A) Any option in (i)(A) through (F) of this subsection; or

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

(d) A manufacturer of refrigeration products and equipment (including refrigeration products and equipment that contain foam) must disclose the substitutes through one of following methods:

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

(A) New dedicated label;

(B) Underwriters Laboratories or equivalent safety label;

(C) A label required by another jurisdiction that discloses the compliance status of the product; or

(D) On-product or on-equipment symbol or code; and online disclosure.

(ii) 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:

(A) New dedicated label;

(B) Underwriters Laboratories or equivalent safety label;

(C) Owner's manual; or

(D) On-product or on-equipment symbol or code; and online disclosure.

(iii) For the refrigerant used in commercial refrigeration equipment:

(A) New dedicated label;

(B) Existing product label;

(C) Underwriters Laboratories or equivalent safety label;

(D) A label required by another jurisdiction that discloses the compliance status of the product or equipment; or

(E) On-product or on-equipment symbol or code; and online disclosure.

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

(A) New dedicated label;

(B) Existing product label;

(C) Underwriters Laboratories or equivalent safety label;

(D) Owner's manual; or

(E) On-product or on-equipment symbol or code; and online disclosure.

(e) A manufacturer of centrifugal or positive displacement chillers must disclose the substitutes through one of following methods:

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

(A) New dedicated label;

(B) Existing product label;

(C) Underwriters Laboratories or equivalent safety label;

(D) A label required by another jurisdiction that discloses the compliance status of the product or equipment; or

(E) On-product or on-equipment symbol or code; and online disclosure.

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

(A) New dedicated label;

(B) Existing product label;

(C) Underwriters Laboratories or equivalent safety label;

(D) Owner's manual;

(E) A label required by another jurisdiction that discloses the compliance status of the product; or

(F) On-product or on-equipment symbol or code; and online disclosure.

(f) A manufacturer of foam products must disclose the substitutes through one of following methods:

(i) For nonretail foam products:

(A) Unit label; or

(B) One of the following methods for each individual product within a unit:

(I) New dedicated label;

(II) Existing product label;

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

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

(ii) For retail foam products:

(A) New dedicated label;

(B) Existing product label;

(C) On-packaging label;

(D) A label required by another jurisdiction that discloses the compliance status of the product or equipment;

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

(F) On-packaging symbol or code; and online disclosure.

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

(A) New dedicated label on the canister or cylinders;

(B) Existing product label on the canister or cylinders;

(C) On-packaging label;

(D) A label required by another jurisdiction that discloses the compliance status of the product; or

(E) On-packaging symbol or code; and online disclosure.

(g) Ecology must approve in advance the use of a symbol or code.

(h) Ecology must approve in advance the use of another jurisdiction's disclosure label.

(i) 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.

(j) The requirements of this section do not apply to aircraft and aircraft components subject to certification requirements of the Federal Aviation Administration.

(5) Alternative disclosure.

(a) A manufacturer may use an alternative disclosure method to an on-product label described in WAC 173-443-060(4) provided the conditions in subsections (i) and (ii) and (iii) of this subsection are met.

(i) A manufacturer submits a written statement to ecology describing the condition that prevents use of an on-product label and proposing an alternative disclosure method for the product or equipment.

(ii) Ecology determines that use of an alternative disclosure method is warranted and that the proposed disclosure method satisfactorily communicates the substitutes used or the compliance status of the product or equipment.

(iii) The manufacturer receives written confirmation from ecology that the proposed disclosure method may be used to satisfy WAC 173-443-060(4) for the product or equipment.

(iv) Ecology will provide a written response to a request for use of an alternative disclosure method by approving or denying the request, or requesting additional information, within thirty (30) days of receipt.

(6) Manufacturer reporting.

(a) A manufacturer of a product or equipment that contains or uses HFCs or other substances as of July 28, 2020, prohibited for an end-use listed in WAC 173-443-040, Table 1, or a representative on behalf of the manufacturer, must report to ecology consistent with WAC 173-443-060(7) and (8).

(b) It is only necessary for one person or entity to report for a particular product or equipment.

(c) In the event of a failure by at least one person to provide a complete, accurate, and timely report for a product or equipment within a specific end-use, ecology will require information from the manufacturer associated with the product or equipment in the following order of precedence:

(i) The person or entity that manufactured, produced, or assembled the product or equipment, unless it has no presence in the United States.

(ii) The person or entity that marketed the product or equipment under its name or trademark, unless it has no presence in the United States.

(iii) The first person or entity, whether an importer or a distributor, that owned the product or equipment in the United States.

(d) This section in no way limits the liability of any manufacturer, as defined in WAC 173-443-030, associated with a product or equipment from enforcement under chapter 70A.15 RCW.

(7) Initial notification.

(a) 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 HFCs or other substitutes prohibited in WAC 173-443-040, Table 1.

(b) 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.

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

(i) Contact information on the manufacturer.

(ii) The name of the party authorized to represent the manufacturer for purposes of providing initial status notifications and status updates.

(iii) All products and equipment within an end-use that are applicable to the manufacturer.

(iv) Which HFCs or other prohibited substitutes are being used by products or equipment within each applicable end-use.

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

(8) Status update notification.

(a) Within one hundred twenty days after the date of a prohibition in WAC 173-443-040, a manufacturer affected by the prohibition or its representative must provide ecology with an updated status notification using ecology's form. This updated status notification must include:

(i) Whether the manufacturer has ceased the use of HFCs or other substitutes prohibited in WAC 173-443-040 within each applicable end-use.

(ii) What, if any, HFCs or other prohibited substitutes remain in use.

(iii) Updated responses on all information requested in the initial status notification required in WAC 173-443-060(7).

WAC 173-443-065 Requirements applicable to new stationary refrigeration end-uses listed in WAC 173-443-040, Table 2.

(1) Prohibitions. No person shall offer for sale, lease, rent, install, or other entry into Washington commerce any refrigeration equipment manufactured after the effective date that does not comply with the requirements of WAC-443-040, Table 2, unless an exemption is provided for in WAC 173-443-050.

(2) Product labeling and disclosure. As of the effective date of this chapter, a manufacturer of any refrigeration equipment listed in WAC 173-443-040, Table 2, intended for sale or other entry into Washington commerce, must disclose the refrigerants contained or used in its equipment. The disclosure must be in the form of an on-product label that displays the following information:

(a) Chemical name of high-GWP refrigerant(s) or blend containing a high-GWP refrigerant;

(b) Where available, the refrigerant charge size in either ounces, pounds, or kilograms;

(c) The date of manufacture; and

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

(3) Record keeping. As of the effective date of this chapter, a manufacturer of any refrigeration equipment listed in WAC 173-443-040, Table 2, must maintain for a minimum of five years, and make available upon request by ecology, a copy of the following records:

(a) Name and address of the person purchasing the equipment;

(b) Telephone number and email address of the person purchasing the equipment, if provided to the manufacturer;

(c) Model and serial number of the equipment;

(d) Date of manufacturer of the equipment;

(e) Refrigerant type the equipment is designed to use; and

(f) Refrigerant and full capacity of the equipment, where available.

WAC 173-443-070 Requirements applicable to new stationary air conditioning end-uses listed in WAC 173-443-040, Table 3.

(1) Prohibitions. No person shall offer for sale, lease, rent, install, or other entry into Washington commerce any air conditioning equipment manufactured after the effective date that does not comply with the requirements of WAC-443-040, Table 3, unless an exemption is provided for in WAC 173-443-050.

(2) Product labeling and disclosure. As of the effective date of this chapter, a manufacturer of any air conditioning equipment listed in WAC 173-443-040, Table 3, intended for sale or other entry into Washington commerce, must disclose the refrigerants contained or used in its equipment. The disclosure must be in the form of an on-product label that displays the following information:

(a) Chemical name of high-GWP refrigerant or blend containing a high-GWP refrigerant;

(b) Where available, the refrigerant charge size in either ounces, pounds, or kilograms;

(c) The date of manufacture; and

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

(3) Record keeping. As of the effective date of this chapter, a manufacturer of any air conditioning equipment listed in WAC 173-443-040, Table 3, must maintain for a minimum of five years, and make available upon request by ecology, a copy of the following records:

(a) Name and address of the person purchasing the equipment;

(b) Telephone number and email address of the person purchasing the equipment, if provided to the manufacturer;

(c) Model and serial number of the equipment;

(d) Date of manufacture of the equipment;

(e) Date of sale of the equipment;

(f) Refrigerant type the equipment is designed to use; and

(g) Refrigerant and full capacity of the equipment, where available.

WAC 173-443-075 Requirements applicable to small containers of automotive refrigerant and nonessential consumer products end-uses listed in WAC 173-443-040, Table 4.

(1) Prohibitions. No person shall sell, offer for sale, or purchase any product after the effective date that does not comply with the requirements of WAC 173-443-040, Table 4, unless an exemption of provided for in WAC 173-443-050.

WAC 173-443-080 Variances.

(1) An applicant may submit a request to the ecology HFC program for a variance from the requirements 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 all requirements identified in subsection (3) of this section.

(2) Types of variances. Ecology may grant a variance for any of the following:

(a) Impossibility. The applicant can demonstrate all of the following:

(i) A lower risk substitute is not currently or potentially available;

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

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

(b) Force majeure. The applicant can demonstrate all of the following:

(i) Noncompliance is due to a force majeure event; and

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

(c) Economic hardship. The applicant can demonstrate all of the following:

(i) The facility is a retail food facility or meets the definition of small business as defined in WAC 173-443-030; and;

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

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

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

(b) Description of business activity or product description;

(c) Relationship to the product;

(d) The specific section(s) for which a variance is requested;

(e) An explanation and description of the reasons for seeking a variance;

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

(g) Length of variance requested and the earliest date when compliance will be achieved;

(h) A description of the damage or harm that will result from having to comply with the requirements within the required timeframe;

(i) A compliance plan describing in detail how, if a variance is granted, compliance will be achieved as soon as possible, including all of the following:

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

(ii) Milestone achievements;

(iii) Milestone dates; and

(iv) Description of proposed mitigation measures to reduce emissions while the variance is in place.

(j) The application may be submitted in writing to either of the following addresses:

Ecology Air Quality Program
Attention: HFC Unit Supervisor
P.O. Box 47600
Olympia, WA 98504-7600; or

By email to:
HFC@ecology.wa.gov
Attention: HFC Unit Supervisor

(4) Approval and disapproval process.

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

(b) Within twenty (20) days of determining that the application is complete, ecology will post a notice of the variance application on ecology's HFC webpage and public events and input webpage and invite the public to comment on the application for twenty (20) days from the date information about the application is posted.

(c) When making a decision on the application, ecology will consider all comments submitted during the public comment period.

(d) Ecology will approve or disapprove the variance application within thirty (30) days after close of the public comment period.

(e) 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.

(f) Ecology will grant a variance only to the applicant. The variance is nontransferable.

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

(h) Ecology may expeditiously approve a variance application prior to the close of the public comment period for a force majeure event meeting the criteria identified in (2)(b) of this section.

(i) An applicant adversely affected by an ecology denial of a variance or the terms and conditions of granting a variance may seek review of ecology's decision under chapter 34.05 RCW.

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

(a) An applicant must comply with the terms of an approved variance in order 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 seek review of ecology's decision under chapter 34.05 RCW.

REFRIGERANT MANAGEMENT PROGRAM

WAC 173-443-100 Refrigerant management program (RMP) purpose and applicability.

(1) The purpose of the RMP is to reduce greenhouse gas emissions from stationary commercial refrigeration and air conditioning systems and from the installation and servicing of stationary refrigeration and air conditioning systems using high-GWP refrigerants.

(2) The RMP requirements apply to:

(a) An owner or operator of a stationary refrigeration or air conditioning system with a full charge greater than or equal to fifty (50) pounds of a high-GWP refrigerant;

(b) Any person who installs, repairs, maintains, services, replaces, recycles, or disposes of a stationary refrigeration or air conditioning system; and

(c) Any person who distributes or reclaims refrigerants with a high global warming potential.

WAC 173-443-105 Registration requirements for facilities with stationary refrigeration or air conditioning systems.

(1) Full charge of 1,500 pounds or greater. The owner or operator of a refrigeration or air conditioning system with a full charge greater than or equal to 1,500 pounds of a high-GWP refrigerant must register with ecology by providing the information specified in subsection (5) of this section as follows:

(a) By March 1, 2024, for refrigeration or air conditioning systems that begin operations before January 1, 2024; or

(b) By March 1 of the calendar year after the system begins operations for refrigeration or air conditioning systems that begin operations on or after January 1, 2024.

(2) Full charge of 200 to 1,499 pounds. The owner or operator of a refrigeration or air conditioning system with a full charge greater than 199 pounds, but less than 1,500 pounds of a high-GWP refrigerant must register with ecology by providing the information specified in subsection (5) of this section as follows:

(a) By March 1, 2026, for refrigeration or air conditioning systems that begin operations before January 1, 2024; or

(b) By March 1 of the calendar year after the system begins operations for refrigeration or air conditioning systems that begin operations on or after January 1, 2026.

(3) Full charge of 50 to 199 pounds. The owner or operator of a refrigeration or air conditioning system with a full charge greater than or equal to 50 pounds, but less than 200 pounds of a high-GWP refrigerant must register with ecology by providing the information specified in subsection (5) of this section as follows:

(a) By March 1, 2028, for refrigeration or air conditioning systems that begin operations before January 1, 2028; or

(b) By March 1 of the calendar year after the system begins operations for refrigeration or air conditioning systems that begin operations on or after January 1, 2028.

(4) New owners. If there is a change of ownership of a facility that has been registered in accordance with this section, the new owner or operator must register with ecology by March 1 of the calendar year after the change of ownership has occurred.

(5) Registration information. To register, the owner or operator must provide the following information to ecology through the Washington RMP reporting tool:

(a) Facility information:

(i) Name of owner;

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

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

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

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

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

(vii) Facility contact person; and

(viii) Facility contact person phone number and email address.

(b) Refrigeration or air conditioning system information:

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

(ii) Type. The system type information must include whether it is a refrigeration or air conditioning system and the specific end-use;

(iii) Equipment manufacturer name;

(iv) Equipment model and model year;

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

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

(vii) Full charge the system is designed for to maintain normal operating characteristics; and

(viii) Type of high-GWP refrigerant used.

(6) Change of ownership. Before any change of ownership, a person selling a refrigeration or air conditioning system must ensure all of the following:

(a) The refrigeration or air conditioning system is free of refrigerant leaks though a leak inspection performed by a technician certified by EPA under 40 CFR 82.161; and

(b) If the refrigeration or air conditioning system has been registered in accordance with this section, the seller has informed the buyer of the registration requirements and has submitted a change of ownership notification to ecology. The change of ownership notification must include all of the following:

(i) Seller information:

(A) Facility identification number;

(B) Name of owner or operator; and

(C) Name of facility and facility identifier that was assigned by the equipment owner or operator in the previous registration.

(ii) Buyer information:

(A) Name of owner or operator;

(B) Name of facility and facility identifier such as a store number;

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

(D) Name of facility contact, phone number, and email address.

WAC 173-443-110 Implementation fees for facilities with stationary refrigeration or air conditioning systems.

(1) Initial implementation fee. An implementation fee must be paid by each owner or operator of a facility with a refrigeration or air conditioning system with a full charge greater than or equal to 1,500 pounds of a high-GWP refrigerant. The initial implementation fee is due and payable to ecology on the same date that registration of the system is required under WAC 173-443-105. The amount of the implementation fee is $150.

(2) Annual implementation fee. An annual implementation fee must be paid by each owner or operator of a facility with a refrigeration or air conditioning system with a full charge greater than or equal to 200 pounds of a high-GWP refrigerant. The annual implementation fee is due and payable to ecology no later than April 1 of each year beginning with the year in which the registration fee is required. The amount of the annual implementation fee is based on the refrigeration or air conditioning system with the largest charge operating at the facility.

(a) Systems with a full charge of 1,500 or more pounds.

(i) Beginning January 1, 2024, the annual implementation fee for refrigeration or air conditioning systems with a full charge of 1,500 pounds or greater is $370.

(ii) Beginning January 1, 2025, and each year thereafter, the amount of the annual implementation fee will be established through a public process as described in subsection (4) of this section and announced on ecology's HFC webpage no later than XXX.

(b) Systems with a full charge of 200 to 1,499 pounds.

(i) Beginning January 1, 2026, the annual implementation fee for refrigeration or air conditioning systems with a full charge of 200 to 1,499 pounds is $170.

(ii) Beginning January 1, 2027, and each year thereafter, the amount of the annual implementation fee will be established through a public process as described in subsection (4) of this section and announced on ecology's HFC webpage no later than XXX.

(3) Summary of initial and annual implementation fees. (ADD TABLE)

(4) Process for future fee adjustments. TBD.

(5) All fees collected under this section must be deposited into the refrigerant emission management account fund in accordance with RCW 70A.60.050.

WAC 173-443-115 Leak detection and monitoring requirements.

(1) Refrigeration and air conditioning systems with a full charge capacity greater than or equal to 1,500 pounds.

(a) The owner or operator of a refrigeration or air conditioning system with a full charge capacity greater than or equal to 1,500 pounds of a high-GWP refrigerant, that is intended to operate year-round, must do the following:

(i) By January 1, 2024, conduct a leak inspection each month using a calibrated refrigerant leak detection device, or bubble test.

(ii) A monthly leak inspection is not required if an automatic leak detection system that meets the requirements of subsection (2)(b) or (c) of this section is installed and operating on the system.

(2) Refrigeration systems with a full charge of 1,500 pounds or more.

(a) The owner or operator of a refrigeration system with a full charge capacity greater than or equal to 1,500 pounds of a high-GWP refrigerant, that is intended to operate year-round, must do the following:

(i) By January 1, 2025, install an automatic leak detection system that meets the requirements of subsection (2)(b) or (c) of this section if:

(A) The refrigerant circuit is located entirely within an enclosed building or structure; or

(B) The compressor, evaporator, condenser, or any other component of the refrigeration system is located inside an enclosed building or structure.

(ii) Installation of an automatic leak detection system under subsection (2)(b) or (c) of this section is not required if the refrigeration system will be replaced or retrofitted to a low-GWP refrigerant before January 1, 2027. Written documentation of the intent to transition, including signature of the facility representative, must be kept in accordance with WAC 173-443-140.

(b) For an automatic leak detection system that detects the presence of a high-GWP refrigerant in the air, the automatic leak detection system must be annually audited and calibrated using the manufacturer recommended procedures so that it:

(i) Accurately detects a concentration level of 10 parts per million of vapor of the specific refrigerant(s) used in the refrigeration system; and

(ii) Alerts the operator when a refrigerant concentration of 100 parts per million of vapor of the refrigerant(s) is reached.

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

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

(3) Refrigeration and air conditioning systems with a full charge greater than or equal to 200 pounds but less than 1,500 pounds.

(a) The owner or operator of a refrigeration or air conditioning system with a full charge greater than or equal to 200 pounds but less than 1,500 pounds, that is intended to operate year-round, must do the following:

(i) By January 1, 2024, conduct a leak inspection of the system at least once every three months using a calibrated refrigerant leak detection device, or bubble test.

(ii) A quarterly leak inspection is not required if an automatic leak detection system that meets the requirements of (2)(b) or (c) is installed and operating correctly on the system.

(4) Refrigeration and air conditionings systems with a full charge greater than or equal to 50 pounds, but less than 200 pounds.

(a) The owner or operator of a refrigeration or air conditioning system with a full charge greater than or equal to 50 pounds, but less than 200 pounds, that is intended to operate year-round must do the following:

(i) By January 1 2024, conduct a leak inspection of the system at least once each year using a calibrated refrigerant leak detection device, or bubble test.

(ii) An annual leak inspection is not required if an automatic leak inspection system that meets the requirements of (2)(b) or (c) of this section is installed and operating correctly on the system.

(5) Additional leak inspections.

(a) The owner or operator of a refrigeration or air conditioning system with a full charge greater than or equal to 50 pounds of a high-GWP refrigerant must conduct a leak inspection after any of the following events:

(i) Additional refrigerant charge equal to or greater than 5 pounds, or 1 percent of the full charge of the appliance, is added; or

(ii) Oil residue is observed on any refrigerant circuit component indicating a refrigerant leak.

(6) Refrigeration and air conditioning systems not operated year-round.

(a) The owner or operator of a refrigeration or air conditioning system that is not intended to operate year-round must conduct a leak inspection within 30 days after starting each operation, and once every three months thereafter until the system is shut down.

(b) The leak inspection must be conducted using a calibrated refrigerant detection device, or bubble test.

(7) Leak detection and monitoring during system mothballing. The requirements of this section do not apply during the time that a system is undergoing mothballing. The requirements of this section will apply on the day the system resumes operation.

WAC 173-443-120 Leak rate thresholds and notification requirements.

(1) The owner or operator of a stationary refrigeration or air conditioning system with a full charge greater than or equal to 50 pounds of a high-GWP refrigerant must ensure that the leak rate is calculated at each leak inspection and each time refrigerant is added.

(2) The leak rate must be calculated using the 12-month rolling average method, as defined in WAC 173-443-030, and the results of each calculation must be kept on file in accordance with WAC 173-443-140.

(3) The owner or operator of a refrigeration or air conditioning system that exceeds the applicable leak rate threshold, based on the 12-month rolling average, must notify ecology, through the WA RMP data reporting system, within 30 days of determination of the exceedance. The leak rate thresholds are as follows:

(a) 16 percent for a commercial or retail refrigeration system;

(b) 24 percent for an industrial process refrigeration system; or

(c) 8 percent for an air conditioning system.

(4) Following the notification described in subsection (3) of this section, the owner or operator of a refrigeration or air conditioning system that exceeds the applicable leak rate threshold must also notify ecology of all of the following:

(a) The results of an initial verification test required under WAC 173-443-120(5) no later than 30 days after expiration of the timeframe described in WAC 173-443-125(7)(a).

(b) The results of a follow up verification test, if required under WAC 173-443-120(6), no later than 30 days after completing the follow up verification test conducted in accordance with WAC 173-443-125(6); and

(c) Within 30 days of completion of all work described in a retrofit or retirement plan prepared in accordance with WAC 173-443-130.

WAC 173-443-125 Leak repair requirements.

(1) Beginning January 1, 2024, the owner or operator of a refrigeration or air conditioning system with a refrigerant charge greater than or equal to 50 pounds of a high-GWP refrigerant must ensure that all detected refrigerant leaks are repaired as provided in this section and must maintain records in accordance with WAC 173-443-140.

(2) 14-day requirement. A refrigerant leak must be repaired by a certified technician, as defined in WAC 173-443-030, within 14 days of its detection, except when a longer time period is allowed under subsections (3) or (4) of this section.

(3) 45-day allowance. The time period for repair of an identified leak is up to 45 days if one or more of the following conditions apply:

(a) A certified technician is not available to complete the repair or replace the component(s). A written record must be kept in accordance with WAC 173-443-140 that no certified technician was available within 14 days of the initial leak detection;

(b) The parts necessary to repair a refrigerant leak are unavailable. A written record must be kept in accordance with WAC 173-443-140 that the necessary parts were unavailable within 14 days of the initial leak detection. The written record must include a written statement from the manufacturer; or

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

(4) 120-day allowance. The time period for a repair of an identified leak is up to 120 days if all of the following conditions apply:

(a) The facility owner or operator is an entity subject to the mandatory reporting of greenhouse gas emissions under chapter 173-441 WAC;

(b) The system is an industrial process refrigeration system;

(c) The refrigerant leak requires an industrial process shutdown that results in ceasing to manufacture the desired product; and

(d) Written records that document that required conditions are met must be maintained in accordance with WAC 173-443-140.

(5) Initial verification test. An initial verification test must be conducted upon completion of refrigerant leak repairs.

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

(7) Refrigerant leak repair requirements after an unsuccessful verification test. If an initial or follow up verification test indicates that a refrigerant leak is still occurring after a repair attempt and there is not an approved exemption in place under WAC 173-443-160, the owner or operator must do one of the following:

(a) Ensure that the leak is repaired through a subsequent repair attempt(s) within a second timeframe that equals the same number of days allowed under subsections (2) through (4) of this section; or

(b) Prepare a retrofit or retirement plan in accordance with WAC 173-443-130.

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

WAC 173-443-130 Requirements to prepare and implement a retrofit or retirement plan.

(1) The owner or operator of a refrigeration or air conditioning system with a full charge greater than or equal to 50 pounds of a high-GWP refrigerant that is not repaired within the timeframe provided in WAC 173-443-120(2) or (3), and does not have an approved exemption under WAC 173-443-160, must prepare and implement a retrofit or retirement plan that meets all of the following conditions:

(a) The plan must establish a schedule to retrofit or retire a leaking refrigeration or air conditioning system of no later than six months after initial detection of the refrigerant leak. All work must be completed in this six-month period;

(b) The plan must be kept at the facility with the leaking stationary refrigeration or air conditioning system in accordance with WAC 173-443-140;

(c) The plan must address the retrofitted system, or the new system if an existing system being replaced, and include the following:

(i) System identification number as it appears in the WA RMP reporting system registration;

(ii) System type;

(iii) Equipment manufacturer;

(iv) Equipment model or description;

(v) Temperature classification. A refrigeration system must be identified as a low, medium, or other temperature system;

(vi) Full refrigerant charge of the system;

(vii) Type of refrigerant to be used;

(viii) A timetable that includes the expected beginning date and completion date for the installation, construction, or retrofit; and

(ix) A signature by a representative of the facility and date signed.

(2) The retrofit or retirement plan must be submitted to ecology if the applicable leak rate threshold, based on the 12-month rolling average, is exceeded. The plan must be submitted no later than 90 days following expiration of the timeframe described in WAC 173-443-125(7)(a).

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

WAC 173-443-135 Reporting requirements.

(1) An owner or operator of a stationary refrigeration or air conditioning system with a full charge greater than or equal to 200 pounds of a high-GWP refrigerant must submit an annual facility stationary refrigeration or air conditioning report (annual report) to ecology each year.

(2) Annual reports must be submitted to ecology by March 1 for the previous calendar year the refrigeration or air conditioning system was in operation and must continue each calendar year thereafter. Annual reports must be submitted by the following dates:

(a) By March 1, 2025, for a refrigeration or air conditioning system with a full charge greater than or equal to 1,500 pounds that begins operation before January 1, 2024.

(b) For a refrigeration or air conditioning system with a full charge greater than or equal to 1,500 pounds that begins operation on or after January 1, 2024, the annual report must be submitted by March 1 of the year after the calendar year in which the system begins operation.

(c) By March 1, 2027, for a refrigeration or air conditioning system with a full charge greater than or equal to 200 pounds, but less than 1,500 pounds, that begins operation before January 1, 2026.

(d) For a refrigeration or air conditioning system with a full charge greater than or equal to 200 pounds, but less than 1,500 pounds, that begins operation on or after January 1, 2026, the annual report must be submitted by March 1 of the year after the calendar in which the system begins operations.

(3) Annual reports must include the following information for the previous calendar year for each refrigeration or air conditioning system with a full charge greater than or equal to 200 pounds of a high-GWP refrigerant:

(a) System information.

(i) System identification number as it appears in the WA RMP reporting system registration;

(ii) System type;

(iii) Equipment manufacturer;

(iv) Equipment model or description and model year;

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

(vi) Temperature classification. A refrigeration system must be identified as a low, medium, or other temperature system;

(vii) Total refrigerant charge of system;

(viii) Type of high-GWP refrigerant used; and

(ix) Date of initial installation.

(b) Service and leak repair information.

(i) Annual leak rate as calculated based on 12-month rolling average method;

(ii) Date of each leak inspection;

(iii) Date of each leak detection;

(iv) Date of service or leak repair completed;

(c) Refrigerant purchases and use information.

(i) Total weight in pounds of each type of high-GWP refrigerant purchased;

(ii) Total weight in pounds of each type of high-GWP refrigerant charged into the system;

(iii) Total weight in pounds of each type of high-GWP refrigerant recovered from the system;

(iv) Total weight in pounds of each type of high-GWP refrigerant stored in inventory at the facility, or stored at a different location for use in the facility, on the last day of the calendar year; and

(v) Total weight in pounds of any high-GWP refrigerant that was shipped by the owner or operator for reclamation and for destruction;

WAC 173-443-140 Recordkeeping requirements.

(1) Beginning January 1, 2024, the owner or operator of a facility with a refrigeration or air conditioning system with a full charge greater than or equal to 50 pounds of a high-GWP refrigerant must maintain the following records for a minimum of five years:

(a) All registration information required in WAC 173-443-105;

(b) Documentation of all leak detection systems, leak inspections, and annual audit and calibrations for automatic leak detection systems;

(c) Records of system service and refrigerant leak repairs and documentation of any conditions allowing more than 14 days to repair a refrigerant leak after detection under WAC 173-443-120(3) or (4);

(d) Any retrofit or retirement plan required under WAC 173-443-125;

(e) All reports required by WAC 173-443-130;

(f) Any application for an exemption under WAC 173-443-155 and any ecology notification of approval, denial, revocation, or modification of an exemption;

(g) Any plan or other documentation indicating that the refrigeration system will be replaced or retrofitted to a low-GWP refrigerant before January 1, 2027. The plan or other documentation must include a signature of the facility representative;

(h) Invoices of all high-GWP refrigerant purchases;

(i) Records of all shipments of high-GWP refrigerants for reclamation or destruction. The records must include all of the following information:

(i) Name and address of the person the refrigerant was shipped to;

(ii) Date of shipment;

(iii) Type of refrigerant shipped;

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

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

(2) The records in subsection (1) of this section must be kept at the facility where the refrigeration or air conditioning system is in operation and must be made available to an authorized representative of ecology's HFC program upon request.

WAC 173-443-145 Required service practices.

(1) A person performing any installation, maintenance, service, repair, or disposal of a stationary refrigeration or air conditioning system with a full charge greater than or equal to 50 pounds of a high-GWP refrigerant must comply with all of the following conditions:

(a) The person must hold a current, valid, and applicable certificate issued under 40 C.F.R. 82.161 (as amended November 18, 2016);

(b) In preparing an appliance for recycling or disposal, the person may not intentionally disrupt the refrigerant circuit resulting in a discharge to the atmosphere unless an attempt to recover the refrigerant is made using certified refrigerant recovery equipment;

(c) The person must make a recovery attempt before opening an appliance to atmospheric conditions. Refrigerant may be returned to the appliance from which it is recovered or to another appliance owned by the same person without being recycled or reclaimed;

(d) The person may not add an additional refrigerant charge unless the refrigerant:

(i) Consists wholly of a regulated refrigerant as defined in WAC 173-443-030; or

(ii) Is an acceptable alternative under the EPA Significant New Alternatives Policy (SNAP) program for the specific equipment;

(e) The person may not add an additional refrigerant charge to an appliance known to have a refrigerant leak unless the additional charge is needed to maintain operations while preparing for or conducting a leak repair.

(f) The person must use refrigerant recovery or recycling equipment certified by EPA under 40 C.F.R. 82.158 (as amended November 18, 2016).

(g) The person must evacuate refrigerant from a nonrefillable cylinder to a vacuum of 15 inches of mercury, relative to standard atmospheric pressure of 29.9 inches of mercury, before recycling or disposal; and

(h) The person must satisfy job site evacuation of refrigerants during recycling, recovering, reclaiming, or disposing in accordance with Title 40 C.F.R. 82.156 (as amended November 18, 2016).

WAC 173-443-150 Reporting requirements for refrigerant wholesalers, distributors, and reclaimers.

(1) Refrigerant distributors or wholesalers.

(a) A refrigerant distributor or wholesaler that sells, supplies, or distributes any amount of high-GWP refrigerant in Washington for any purpose other than sale to a refrigerant distributor or wholesaler for eventual resale, or to any person for reclamation or destruction, must submit an annual report to ecology.

(b) The annual report must be submitted by March 1, 2025, for the previous calendar year and must continue to be submitted by March 1 of each year thereafter for the previous calendar year.

(c) The annual report must cover all facilities in Washington under the operational control of the refrigerant distributor or wholesaler.

(d) The annual report must provide annual statewide aggregated data and must include all of the following information

(i) Contact information:

(A) Name of refrigerant wholesaler or distributor;

(B) Mailing address, including address, city, state, and zip code;

(C) Name of contact person;

(D) Email address of contact person;

(E) Name of each refrigerant distributor or wholesaler facility under operational control;

(F) Address of each refrigerant distributor or wholesaler facility under operational control; and

(G) Contact person name, phone number, and email address for each refrigerant distributor or wholesaler facility under operational control.

(ii) Refrigerant distribution information:

(A) Total statewide annual aggregated weight in pounds of each type of high-GWP refrigerant purchased or received for subsequent resale or delivery for any purpose other than reclamation or destruction; and

(B) Total statewide annual aggregated weight in pounds of each type of high-GWP refrigerant sold or distributed to a facility in Washington other than sales to a refrigerant distributor or wholesaler for eventual resale.

(2) Refrigerant reclaimers.

(a) A certified refrigerant reclaimer reclaiming any high-GWP refrigerant in Washington must submit an annual report to ecology;

(b) The annual report must be submitted by March 1, 2025, for the previous calendar year, and must continue to be submitted by March 1 of each year thereafter for the previous calendar year;

(c) The annual report must cover all facilities in Washington under the operational control of the certified refrigerant reclaimer;

(d) The annual report must provide annual statewide aggregate data and must include all of the following information:

(i) Contact information:

(A) Name of certified reclaimer;

(B) Mailing address including street address, city, state, and zip code;

(C) Name of contact person;

(D) Email address of contact person;

(E) Name of each refrigerant reclaiming facility under operational control;

(F) Address of each refrigerant reclaiming facility under operational control; and

(G) Contact person name, address, phone number, and email address for each reclaiming facility under operational control.

(ii) Refrigerant reclamation information:

(A) Total statewide annual aggregated weight in pounds of high-GWP refrigerant that was received by the certified reclaimer for reclamation or destruction;

(B) Total statewide annual aggregated weight in pounds of high-GWP refrigerant that was shipped out of Washington for reclamation; and

(C) Total statewide annual aggregated weight in pounds of high-GWP refrigerant that was shipped out of Washington for destruction.

WAC 173-443-155 Recordkeeping requirements for refrigerant wholesalers, distributors, and reclaimers.

(1) Beginning January 1, 2024, a refrigerant distributor, wholesaler, or reclaimer of a high-GWP refrigerant must keep all of the following records for a minimum of five years:

(a) Annual reports submitted pursuant to WAC 173-443-145;

(b) Invoices of all high-GWP refrigerant received through sale or transfer and all high-GWP refrigerant distributed for sale or transfer. These invoices must include all of the following information:

(i) Name of the purchaser;

(ii) Date of sale or transfer;

(iii) Quantity sold or transferred; and

(iv) Type of high-GWP refrigerant purchased, sold, or transferred.

(2) A refrigerant distributor or wholesaler selling a high-GWP refrigerant to a purchaser that is an employer of a certified technician must obtain written documentation showing that the purchaser currently employs at least one certified technician.

(3) The records identified in subsection (1) of this section must be kept at the facility of the refrigerant distributor or wholesaler and must be made available to an authorized representative of ecology's HFC program upon request.

WAC 173-443-160 Exemptions.

(1) The owner or operator of a stationary refrigeration or air conditioning system may apply to ecology for an exemption from the requirements of WAC 173-443-125 or WAC 173-443-130. 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. Ecology may grant an exemption for up to three (3) years for any of the following:

(a) Force majeure. The applicant provides clear and convincing documentation that all of the following criteria are met:

(i) Noncompliance is due to a force majeure event; and

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

(b) Economic hardship. The applicant provides clear and convincing documentation 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; and

(ii) Compliance would result in financial hardship such as the closure of the facility or a substantial loss of revenue from the facility.

(c) Impossibility. The applicant provides clear and convincing documentation that at least one of the following criteria is met:

(i) Component(s) needed for the repair is not currently or potentially available; or

(ii) The applicant has made a good faith effort to repair all identified leaks in accordance with WAC 173-443-125 and operate and maintain the system in accordance with manufacturer recommendations.

(3) Application process. To apply for an exemption, the applicant must submit an application that addresses (a) through (h) of this subsection:

(a) Name of business;

(b) Type of business or business activity;

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

(d) Name of business contact;

(e) Business contact phone number and email address;

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

(g) Length of time for which the exemption is requested; and

(h) A compliance plan describing how compliance will be achieved if an exemption is granted. The compliance plan must include all of the following:

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

(ii) Milestone achievements;

(iii) Milestone dates; and

(iv) Description of proposed mitigation measures to minimize emissions while the exemption is in place.

(4) Approval and disapproval process.

(a) Ecology will determine whether the application is complete and will notify the owner or operator 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 reaching a decision.

(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 will specify the terms and conditions of the exemption, if granted. Such conditions may include a requirement that best management practices be followed or that mitigation measures identified in the applicant's compliance plan be implemented.

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

(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 the terms and conditions of granting an exemption, may seek review of ecology's decision under chapter 34.05 RCW.

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

(a) The applicant must comply with the terms 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 seek review of ecology's decision under chapter 34.05 RCW.

WAC 173-443-165 Enforcement. Violations of this chapter are subject to the penalty provisions and/or other remedies provided in chapter 70A.15 RCW.

WAC 173-443-170 Confidentiality. TBD

WAC 173-443-175 Severability. If any provision of this chapter or its application is held invalid, the remainder of the chapter or application of the provision is not affected.