Modifications to the Proposed Regulation Order

Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary Air-conditioning, ~~Chillers, Aerosols-Propellants,~~ and ~~Foam~~ Other End-Uses

California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4

[Note: The amendments to existing regulatory language are shown in ~~strikethrough~~ to indicate deletions and underline to indicate additions. New deletions and additions to the proposed language that are made public with this notice are shown in ~~double strikethrough~~ and double underline format, respectively]

Amend sections 95371, 95372, 95373, 95374, 95375, 95376, and 95377, 95378, and add section 95379, Article 4, Subarticle 5, Chapter 1, Division 3, Title 17, California Code of Regulations to read as follows:

Subarticle 5. Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary Air-conditioning, ~~Chillers,~~ ~~Aerosols-Propellants,~~ and ~~Foam~~ Other End-Uses

§ 95371. Purpose.

The purpose of this subarticle is to reduce hydrofluorocarbon (HFC) emissions by adopting specific prohibitions for certain substances in refrigeration, air-conditioning, chillers, ice rinks, cold storage, aerosols-propellants, and foam end-uses to support California's ~~progress toward the 2030~~ greenhouse gas emission reduction goals ~~and hydrofluorocarbon emissions reduction targets as well as the Short Lived Climate Pollutant Strategy~~.

NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734 and 41511, Health and Safety Code. Reference: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734 and 41511, Health and Safety Code.

§ 95372. Applicability.

This subarticle applies to any person who sells, leases, rents, installs, uses, or otherwise enters into commerce, in the State of California, any product, equipment,

material, or substance in end-uses listed in Table 1, section 95374(a); Table 2, section 95374(b); Table 3, section 95374(c); or Table 4, section 95374(d) of this subarticle.

NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730.5, 39734, and 41511, Health and Safety Code. Reference: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734, and 41511, Health and Safety Code.

§ 95373. Definitions.

(a) For the purposes of this subarticle, ~~excepting sections 95374(b) and 95376,~~ the following definitions shall apply:

"Aerosols" or *"Aerosol"* means an aerosol product with a pressurized spray system that dispenses product ingredients by means of a propellant contained in a product or a product's container, or by means of a mechanically induced force.

"Air-conditioning (AC) Equipment" or *"Air-conditioning System"* means equipment that cools, heats or dehumidifies spaces in residential or non-residential settings, for comfort cooling and other purposes, including but not limited to room air conditioning such as window units, packaged terminal air conditioners (PTAC), packaged terminal heat pumps (PTHP), and portable air conditioners; central air conditioners and heat pumps (i.e., ducted); non-ducted air conditioners and heat pumps~~systems~~ (both mini and multi splits); packaged rooftop units; water-source and ground-source heat pumps; and dehumidifiers. Air-conditioning also includes computer room and data center cooling and remote condensing units for comfort cooling applications. Chillers are defined separately from "air-conditioning equipment." For the purposes of this regulation, "air-conditioning equipment" applies to stationary air-conditioning equipment and does not apply to mobile air-conditioning, including those used in vehicles, rail and trains, buses, aircraft, watercraft, recreational vehicles, recreational trailers, and campers.

"Air District" means an air quality management district or air pollution control district created or continued in existence under Health and Safety Code sections 40000-41357.

"Air Pollution Control Officer" or *"APCO"* means the appointed head of a local air quality management district or air pollution control district whose appointment and duties are set forth in Health and Safety Code sections 40750-40753.

"Applicant" means, for purposes of this regulation, any person who sells, leases, rents, installs, uses, or otherwise enters into commerce, in the State of California, any substance in end-uses listed in Table 1, section 95374(a); Table 2, section 95374(b); Table 3, section 95374(c); or Table 4, section 95374(d) of this subarticle who applies for a variance under section 95377 of this subarticle. For purposes of this definition, trade groups are not applicants.

"*Baseline Greenhouse Gas Potential*" or "*Baseline GHGp*" means the greenhouse gas potential (GHGp) of a company's retail food facilities at the end of calendar year 2019. The baseline GHGp will be revised when any of the following occur:

(1) Retail food facilities that are sold or transferred will be removed from the baseline GHGp.

(2) Acquired retail food facilities will be added to the baseline GHGp using their 2019 GHGp levels, and the current GHGp of acquired stores will be used to calculate the current GHGp.

"Bear Spray" means a specific aerosol bear deterrent that has active ingredients of capsaicin and related capsaicinoids and is used to deter aggressive or charging bears.

"Blowing Agent" or *"Foam Blowing Agent"* or *"Foam Expansion Agent"* or *"Foaming Agent"* ~~is~~ means a substance that functions as a source of gas to generate bubbles or cells in the mixture during the formation of foam~~which is capable of producing a cellular structure via a foaming process in a variety of materials that undergo hardening or phase transition, such as polymers and plastics. Blowing agents are typically applied when the blown material is in a liquid stage~~.

"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.

"Certified Reclaimed Refrigerant" means used (recovered) refrigerant from a previously operational appliance that has been reclaimed by a U.S. EPA-certified refrigerant reclaimer and meets all of the following conditions:

(1) Meets all specifications in 40 C.F.R. Part 82, Subpart F, Appendix A (Specifications for Refrigerants) (January 1, 2017), which is incorporated herein by reference;

(2) Must have results of the analysis conducted to verify that reclaimed refrigerant meets the necessary specifications as required in (1) above; and

(3) Contains no greater than fifteen percent (15%) new (virgin) refrigerant by weight to meet AHRI 700 standard refrigerant specifications. The certified reclaimer must have documentation that supports it has not exceeded the maximum allowable virgin refrigerant content.

"*Change in Ownership*" means a transfer of the title of a facility subject to this subarticle.

"*Charge*" or "*Refrigerant Charge*" means the amount of refrigerant by mass contained in a refrigeration system. Charge is generally measured by grams, ounces, pounds, or kilograms.

"*Charge Reduction*" means to reduce the refrigerant full charge amount through a mechanical system change in the refrigeration circuit and not simply through a nominal full charge change.

"*Chiller*" means a water or heat transfer fluid chilling equipment package custom built in place, or a factory-made and prefabricated assembly of one (1) 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 refrigeration cycle or absorption refrigeration cycle to transfer heat from a cold water or heat transfer fluid circulating system to the air, a heat transfer fluid, or other heat exchange media. Chillers can be water-cooled, air-cooled, or evaporatively cooled. Chillers include but are not limited to rotary chillers, centrifugal chillers, and positive displacement chillers, including reciprocating, scroll, and screw chillers. For the purpose of this regulation, "chiller" includes those used for comfort cooling, space and area cooling, or industrial process cooling. A chiller used for refrigeration in a retail food facility is considered an indirect type of "supermarket system."

"*Class I Substance*" means any ozone-depleting compound defined in the Clean Air Act, as amended, 42 U.S.C. ~~§~~section 7671(3) (effective November 15, 1990).

"*Class II Substance*" means any ozone-depleting compound defined in the Clean Air Act, as amended, 42 U.S.C. ~~§~~section 7671(4) (effective November 15, 1990).

"*Cold Storage*" means a refrigerated facility or warehouse used for the storage of temperature-controlled substances. For the purposes of this regulation, cold storage is regulated as "refrigeration equipment (new), containing more than 50 pounds refrigerant" in section 95374(c).

"*Commercial Ice Machine"* means a non-residential ice machine and/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.

"*Company*" means all businesses, affiliates, brands, or subsidiaries or franchises, owned or operated by the same parent company.

"*Component*" means a part of a refrigeration system, including but not limited to condensing units, compressors, condensers, evaporators, and receivers; and all of its connections and subassemblies, without which the refrigeration system will not properly function or will be subject to failures.

"*Cumulative Replacement*" means the addition of or change in multiple components within a three-year period.

"Date of Manufacture" means:

(1) For foam imported into the state, the date the foam was initially manufactured;

(2) For foam systems imported into the state, the date the polyurethane blend and isocyanate were packaged or labeled; or

(3) For chillers, air-conditioning and refrigeration equipment, the date that the manufacturer affixed an equipment label indicating the equipment's date of manufacture.

(4) For refrigeration and air-conditioning equipment built-up and completed on site, the date that the refrigerant circuit was completed and initially filled with refrigerant.

''End-use'' means processes or classes of specific applications within industry sectors, such as those listed in Table 1, Table 2, Table 3, and Table 4, section 95374 of this subarticle.

"*Executive Officer*" means the Executive Officer of the California Air Resources Board or his or her delegate.

"Executive Order" means, for purposes of this regulation, an order issued by the Executive Officer of CARB that specifies the variance duration with enforceable conditions and requirements necessary to support the variance.

"Flexible Polyurethane" means a non-rigid polyurethane foam including but not limited to that used in furniture, bedding, chair cushions, and shoe soles.

"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 System" means a multipart liquid material that expands when mixed to form a solid or flexible substance in which thin films of material separate pockets of gas.

"Force Majeure" means, for purposes of this regulation, 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 regulation, despite the Applicant's best efforts to fulfill the obligation. This includes events where the local government, State of California, or federal government issues a declaration of emergency, which can include war, wildfires, floods, hurricanes, tornadoes, earthquakes, volcanic eruptions, and pandemics. This does not include negligent acts or the Applicant's 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; ~~or~~

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

~~(3)~~(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 the 100-year GWP value first published by the Intergovernmental Panel on Climate Change (IPCC) in its Fourth Assessment Working Group 1 Report (AR4) (IPCC, 2007); and if not contained in AR4, then the GWP Value means the 100-year GWP value published by the IPCC in its Fifth Assessment Working Group 1 Report (AR5) (IPCC 2013).

"*Greenhouse Gas*" or "*GHG*" means carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), nitrogen trifluoride (NF_3) sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and other fluorinated gases.

"Greenhouse Gas Potential", or "*GHGp*" means:

GHGp = Σ(Charge × GWP)

Where:

∑ is the sum of the products of charge multiplied by the GWP for each separate type of refrigerant.

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

"Household Refrigerators and Freezers" means appliances used to keep food and drink cool, and includes refrigerators, refrigerator-freezers, freezers, and miscellaneous household refrigeration appliances intended for residential use.

"Household Refrigerators and Freezers - Built-in" means any any appliance used for cooling, including but not limited to refrigerator, refrigerator-freezer or freezer that is intended for residential use and meets all of the following:

(1) 7.75 cubic feet or greater total volume and 24 inches or less depth not including doors, handles, and custom front panels;

(2) Sides that are not finished and not designed to be visible after installation;

(3) 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

(4) Equipped with an integral factory-finished face or accept a custom front panel.

"Household Refrigerators and Freezers - Compact" means any appliance used for cooling, including but not limited to refrigerator, refrigerator-freezer or freezer intended for residential use with a total refrigerated volume of less than 7.75 cubic feet (220 liters).

"*Hydrofluorocarbon*" or "*HFC*" means a class of GHGs which are ~~saturated~~ organic compounds containing hydrogen, fluorine, and carbon; primarily used as refrigerants, foam blowing agents, aerosols propellants, solvents, and fire suppressants.

“Ice Rink” means a frozen body of water and/or hardened chemicals, including, but not limited to professional ice skating rinks and those used by the general public for recreational purposes.

“Impossibility” means, for purposes of this regulation, the Applicant exercised best efforts but still was unable to comply with the regulatory requirements for reasons beyond his or her control despite exercising foresight to prevent the non-compliance.

“Industrial Process Refrigeration” means to cool process streams at a specific location in manufacturing and other forms of industrial processes and applications, and are complex, customized systems that are directly linked to the industrial process. Where one appliance is used for both industrial process refrigeration and other applications, it will be considered an industrial process refrigeration system if 50 percent or more of its operating capacity is used for industrial process refrigeration. Industrial process refrigeration or cooling using a chiller is regulated as a chiller. Industrial process refrigeration not using a chiller is regulated as industrial process refrigeration equipment.

“Integral Skin Polyurethane” means a self-skinning polyurethane foam, including but not limited to that used in car steering wheels and, dashboards~~, and shoe soles~~.

“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 Cel~~c~~sius).

“Medium Temperature Refrigeration System” means a commercial or industrial process refrigeration system that maintains food, beverages, or other items at temperatures above 32 degrees Fahrenheit (0 degrees Ce~~nc~~lsius).

“Metered Dose Inhaler” or *“Medical Dose Inhaler”* or *“MDI”* means a device that delivers a measured amount of medication as a mist that a patient can inhale and consists of a pressurized canister of medication in a case with a mouthpiece.

“Motor-bearing” means refrigeration equipment containing motorized parts. This includes compressors, condensers, and evaporators.

“*National Supermarket Chain”* means a retail food chain, brand name, or business operating more than 100 retail food facilities in the United States.

“New Air-conditioning Equipment” means any air-conditioning equipment or system that is one of the following:

(1) F~~f~~irst installed using new components, ~~or~~ used components, or a combination of new or used components;~~,~~ or

(2) An~~a~~ existing system with a single ~~new exterior~~ condenser and single evaporator that has a new exterior condenser, condensing unit, or remote condensing unit;~~,~~ or

(3) ~~a new complete refrigeration circuit in an existing system.~~ An existing system having more than one condenser and/or more than one evaporator that is modified such that the system has experienced cumulative replacements, within any three-year time period, of 75 percent or more of indoor evaporator units (by number), and 100 percent of air source or water source condensing units.

"*New Chiller" or "New Chiller Equipment"* means any chiller equipment or chiller system end-use sectors listed in Table 3, section 95374(c) that is:

(1) First installed using new or used components, or a combination of new or used components; or

(2) Modified such that:

(A) The capacity is increased through the addition of motor-bearing components, including evaporators, compressors, or condensers~~,~~; or

(B) The system has experienced cumulative replacements, within any three-year time period, of motor-bearing components in full or exceeding 50 percent of the capital cost of replacing all the motor-bearing components in the entire chiller system.

"*New Facility"* means, for any refrigeration end-uses listed in Table 3, section 95374(c); and refrigeration end-uses listed in Table 4, section 95374(d), any of the following:

(1) New construction;

(2) An existing facility not previously used for cold storage, retail food refrigeration, commercial refrigeration, industrial process refrigeration, or ice rinks; or

(3) An existing facility used for cold storage, retail food refrigeration, commercial refrigeration, or industrial process refrigeration; with a replacement of 75 percent or more of evaporators (by number) and, 100 percent of compressors racks, and 100 percent of condensers.

"*New Refrigeration Equipment"* means either of the following:

(1) Any refrigeration equipment ~~that is first installed using new or used components; or~~ listed in Table 1 or Table 2, sections 95374(a) and (b) that is:

(A) First installed using new or used components, or a combination of new or used components; or

(B)~~(2) Any refrigeration equipment that is m~~Modified such that ~~it is~~:

1.~~(i)~~ The nominal compressor capacity is increased~~Expanded after the date at which this subarticle becomes effective, to handle an expanded cooling load by the addition of components in which the capacity of the system is increased, including refrigerant lines, evaporators, compressors, condensers, and other components~~; or

2.~~(ii)~~ The system has experienced cumulative replacements, within any three-year time period, of components in full or exceeding 50 percent of the capital cost of replacing the entire refrigeration system, excluding the cost of refrigerated display cases. ~~Replaced or cumulatively replaced after the date at which this subarticle becomes effective, such that the capital cost of replacing or cumulatively replacing components exceeds 50 percent of the capital cost of replacing the entire refrigeration system.~~

(2) Any refrigeration equipment in a new facility, that is first installed using new or used components, or a combination of new or used components, applicable to refrigeration end-use sectors listed in Table 3 and Table 4, sections 95374(c) and (d), in the following:

(A) New construction;

(B) An existing facility not previously used for cold storage, retail food refrigeration, commercial refrigeration, ~~or~~ industrial process refrigeration, or ice rinks; or

(C) An existing facility used for cold storage, retail food refrigeration, commercial refrigeration, or industrial process refrigeration; with a replacement of 75 percent or more of evaporators (by number) and, 100 percent of compressors racks, and 100 percent of condensers, and connected evaporator loads.

"*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" means any stationary, non-residential refrigeration equipment that is used for an application other than retail food, cold storage, ice rinks, industrial process refrigeration, 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.

"*Own*" means to have legal title to the facility that is subject to this subarticle.

"*Owner*" means the person having legal title to the facility that is subject to this subarticle.

"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 the wall. It includes a prime source of refrigeration, separable outdoor louvers, forced ventilation, and heating availability energy.

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

"*Person*" means any individual, firm, association, organization, manufacturer, distributor, partnership, business trust, corporation, limited liability company, company, state, or local governmental agency or public district.

"*Phenolic Insulation Board and Bunstock*" means phenolic insulation manufactured by a process in which a plastic foam forms an insulating core between two flexible tissue faced layers, or produced by mixing high solids and phenolic resin with a surface acting agent, including but not limited to that used for roofing and walls~~~~ insulation. Bunstock or bun stock is a large solid box-like structure formed during the production of polystyrene 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 foam slabs that can be cut and shaped into panels used for, but not limited to, roofing, walls, flooring, and pipes.

“*Polystyrene Extruded Sheet*” means polystyrene foam including that used for packaging. ~~and buoyancy or floatation.~~ It includes but is not limited to products~~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 and which would include polyisocyanurate (‘polyiso’).

“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 single-phase electric current. It includes a source of refrigeration and may include additional means for air circulation and heating.

“Propellant” means a liquefied or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.

“Refrigerant” or *“Refrigerant Gas”* means any substance, including blends and mixtures, which is a compound or gas used in vapor compression cycle refrigeration that is used for heat transfer purposes and provides a cooling or warming effect.

“Refrigerant Blend” is a mixture or combination of two or more single-component refrigerants.

“Refrigerated Food Processing and Dispensing Equipment” means equipment that dispenses and/or processes a variety of food and beverage products by either combining ingredients, mixing or preparing them at the proper temperature, or by function as a holding tank to deliver the product at the desired temperature or to deliver chilled ingredients for the processing, mixing and preparation. Some may use a refrigerant in a heat pump, or utilize waste heat from the cooling system to provide hot beverages. Some may also provide heating functions to melt or dislodge ice or for sanitation purposes. This equipment can be self-contained or connected by piping to a dedicated condensing unit located elsewhere. Equipment within this end-use category include but are not limited to: chilled and frozen beverages (carbonated and non-

carbonated, alcoholic and nonalcoholic); frozen custards, gelato, ice cream, Italian ice, sorbets and yogurts; milkshakes, ‘‘slushies’’ and smoothies, and whipped cream.

“*Refrigeration*” means the use of a refrigerant gas to mechanically move heat from one region to another to create a cooled region via a vapor compression cycle.

“*Refrigeration Equipment*” or *“Refrigeration System”* means any stationary device that is designed to contain and use refrigerant gas, including any device listed in Section 95374(a), Table 1 under the general end-use “refrigeration,” listed in section 95374(b), Table 2 under the general end-use “Household Refrigerators and Freezers” or listed in section 95374(c), Table 3 under the general end-use “Cold Storage Warehouses,” “Industrial Process Refrigeration,” and “Ice Rinks”, or listed in section 95374(d), Table 4 under the general end-use “Retail Food Refrigeration”. For a device with multiple independent circuits, each ~~independent~~ circuit is considered a separate article of equipment. Refrigeration equipment includes refrigeration equipment used in retail food, cold storage, industrial process refrigeration and cooling (not using a chiller), ice rinks, and other refrigeration applications.

“*Refrigerant Registration and Reporting System*” or “*R3 Database*” means a web based tool for implementing the registration, reporting, and fee payment provision for facilities using at least one refrigeration system containing greater than 50 pounds of refrigerant.

“*Remote Condensing Units*” means refrigeration equipment or units that have a central condensing portion and may consist of one (and sometimes two) compressor(s), one condenser, and one receiver assembled into a single unit, which is normally 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, but not limited to, convenience stores, specialty shops (e.g., bakeries, butcher shops), supermarkets, restaurants, and other locations where food is stored, served, or sold.

“*Residential Consumer Refrigeration Products*” means “Household Refrigerators and Freezers”, or “Household Refrigerators and Freezers Compact”, or “Household Refrigerators and Freezers - Built-in”. “Residential Consumer Refrigeration Products”, “Household Refrigerators and Freezers”, “Household Refrigerators and Freezers Compact”, and “Household Refrigerators and Freezers - Built-in”. It does not include refrigerators and freezers used in aircraft, watercraft, passenger vehicles, trucks for personal use, recreational vehicles, recreational trailers, and campers; and do not include refrigerators and freezers used in hospitals, medical facilities, pharmacies, research facilities, and laboratories for the storage of non-food or non-potable drink items.

"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, and mechanically encased assembly consisting of:

(1) A refrigerated surface (evaporator) that condenses moisture from the atmosphere;

(2) A refrigerating system, including an electric motor;

(3) An air-circulating fan; and

(4) A means for collecting or disposing of the condensate.

"Responsible Official" means, for purposes of this regulation, one of the following representatives with authority to bind and make decisions:

(1) For a corporation, a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person;

(2) For a partnership or sole proprietorship, a general partner or the proprietor, respectively; or

(3) For a municipal, state, federal, or other public agency, either a principal executive officer or a ranking elected official.

"*Retail Food Refrigeration"* or "*Commercial Refrigeration*" means equipment designed to store and display chilled or frozen goods for commercial sale or use. This end-use includes but is not limited to the following categories of equipment: stand-alone units (equipment), refrigerated food processing and dispensing units (equipment), remote condensing units, and supermarket systems.

"*Retail Food Facility*" means a facility that sells food and uses at least one retail food refrigeration equipment or refrigeration system with more than 50 pounds of a refrigerant with a GWP value of 150 or greater. Retail food facility includes supermarkets, grocery stores, and any other food merchandising stores.

"*Retire*" means the permanent removal from service of a refrigeration system, or component, rendering it unfit for use by the current or any future owner or operator.

"*Retrofit*", or "*Refrigerant Retrofit"* means the replacement of the refrigerant used in refrigeration equipment with a different refrigerant, and any related changes to the

refrigeration equipment required to maintain its operation and reliability following refrigerant replacement.

"Rigid Polyurethane" means a rigid closed-cell foam containing urethane polymers produced by the reaction of an isocyanate and a polyol.

"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, refrigerated transport trailers, and 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 non-pressurized containers that is field or factory applied in situ using high-pressure proportioning pumps at 800-1600 pounds per square inch (psi) and an application gun to mix and dispense the chemical components.

"*Rigid Polyurethane Laminated Boardstock and Polyisocyanurate Laminated Boardstock*" means laminated board insulation made with polyurethane or polyisocyanurate foam, including but not limited to that used for roofing and walls. ~~This does not include the following end-use categories: rigid polyurethane appliance foam, rigid polyurethane commercial refrigeration and sandwich panels, rigid polyurethane marine flotation foam, rigid polyurethane spray foam, and rigid polyurethane one-component foam sealants.~~

"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 that 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 a buoyancy or flotation polyurethane foam used in boat and ship manufacturing for both structural and flotation purposes.

"Rigid Polyurethane One-component Foam Sealants" means a polyurethane foam generally packaged in aerosol cans that is applied in situ using a gaseous foam blowing agent that is also the propellant for the aerosol formulation.

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

"Room Air Conditioner," or *"Wall Air Conditioner,"* or *"Window Air Conditioner"* means a consumer product, other than a "packaged terminal air conditioner," which is powered by a single phase electric current and which is an encased assembly designed as a unit for mounting in a window or through the wall for the purpose of providing delivery of conditioned air to an enclosed space. It includes a prime source of refrigeration and may include a means for ventilating and heating.

"Stand-alone Units or Equipment" means refrigerators, freezers, and reach-in coolers (either open or with doors) where all refrigeration components are integrated and, for the smallest types, the refrigeration circuit is entirely brazed or welded. These systems are fully charged with refrigerant at the factory and typically require only an electricity supply to begin operation. Stand-alone Units or Equipment does not include commercial ice machines.

"*Stationary*" means the system ~~is:~~ meets at least one of the following conditions:

(1) ~~(i) i~~Installed in a building, structure, or facility;

(2) ~~(ii)a~~Attached to a foundation, or if not attached, will reside at the same ~~location~~ building, structure, or facility for more than twelve consecutive months; or

(3) ~~(iii) l~~Located ~~intermittently~~ permanently at the same facility for at least two consecutive years and operates at that facility a total of at least 90 days each year.

"*Substance*" means any chemical, product substitute, or alternative manufacturing process, whether new or retrofit, intended for use in the end-uses listed in Table 1, section 95374(a); Table 2, section 95374(b);Table 3, section 95374(c); or Table 4, section 95374(d) of this subarticle.

"Supermarket Systems" means multiplex or centralized systems designed to cool or refrigerate, which operate with rack(s) of compressors installed in a machinery room. Two main design classifications are used: direct and indirect systems.

(1) *"Direct Systems*" means the refrigerant circulates from the machinery room to the sales area, where it evaporates in display-case heat exchangers, and then returns in vapor phase to the suction headers of the compressor racks. Another direct supermarket design, often referred to as a distributed refrigeration system,

uses an array of separate compressor racks located near the display cases rather than having a central compressor rack system.

(2) *"Indirect Systems*" means the system uses a central refrigeration system to cool a secondary fluid that is then circulated throughout the store to the cases. This includes secondary loop systems and cascade refrigeration. A chiller used in retail food facilities to cool a secondary fluid subsequently used to cool food, beverage, and displayed products is considered a central refrigeration system.

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

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

"Vending Machine~~s~~" means a self-contained unit~~s~~ that dispense~~s~~ 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.

"Weighted-average GWP" means $\sum$ (charge x GWP)/ $\sum$ charge

Where:

Charge equals the pounds of each separate type of refrigerant, refrigerant blend, or heat transfer fluid used in refrigeration equipment and systems. Refrigeration equipment with more than 50 pounds of refrigerant will be included in the calculation.

GWP is the 100-year GWP value of the refrigerant, refrigerant blend, or heat transfer fluid.

Refrigerant is a specific type of refrigerant, refrigerant blend, or heat transfer fluid, including but not limited to hydrofluorocarbons (HFCs), chlorofluorocarbons (CFCs), hydrofluorocarbons (HCFCs), hydrofluoroolefins (HFOs), carbon dioxide (CO_2), ammonia, water, glycol, and other heat transfer fluids.

∑ in the numerator is the sum of the products of charge multiplied by the GWP for each separate type of refrigerant.

∑ in the denominator is the sum of all pounds of refrigerant charge in all refrigeration equipment with more than 50 pounds of refrigerant.

NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730.5, 39734, and 41511, Health and Safety Code. Reference: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734, and 41511, Health and Safety Code.

§ 95374. List of Prohibited Substances.

(a) The following table lists prohibited substances as of their relevant dates:

Table 1: End-~~U~~use and Prohibited Substances.

General End-Use	Specific End-Use	Prohibited Substances	Effective Date
Refrigeration			
Retail food refrigeration equipment	Supermarket systems (new)[a]	HFC-227ea, R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	Prohibited as of January 1, 2019
Retail food refrigeration equipment	Supermarket systems (refrigerant retrofit)	R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	Prohibited as of January 1, 2019
Retail food refrigeration equipment	Remote condensing units (new)[a]	HFC-227ea, R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	Prohibited as of January 1, 2019

Retail food refrigeration equipment	Remote condensing units (refrigerant retrofit)	R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, R-507A	Prohibited as of January 1, 2019
Retail food refrigeration equipment	Stand-alone medium-temperature units with a compressor capacity below 2,200 Btu/hr and not containing a flooded evaporator (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	Prohibited as of January 1, 2019
Retail food refrigeration equipment	Stand-alone medium-temperature units with a compressor capacity below 2,200 Btu/hr and containing a flooded evaporator (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	Prohibited as of January 1, 2020

Retail food refrigeration equipment	Stand-alone medium-temperature units with a compressor capacity equal to or greater than 2,200 Btu/hr (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	Prohibited as of January 1, 2020
Retail food refrigeration equipment	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)	Prohibited as of January 1, 2020
Retail food refrigeration equipment	Stand-alone units (refrigerant retrofit)	R-404A, R-507A	Prohibited as of January 1, 2019

Retail food refrigeration equipment	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)	Prohibited as of January 1, 2021
Vending machines	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	Prohibited as of January 1, 2019
Vending machines	Vending machines (refrigerant retrofit)	R-404A, R-507A	Prohibited as of January 1, 2019
~~**General End-Use**~~	~~**Specific End-Use**~~	~~**Prohibited Substances**~~	~~**Effective Date**~~
Foam~~s~~ Systems Used to Manufacture			
Foams	Rigid polyurethane laminated boardstock and polyisocyanurate laminated boardstock	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof	Prohibited as of January 1, 2019
	Flexible polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	

	Integral skin polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6	
	Polystyrene extruded sheet	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6	
	Phenolic insulation board and bunstock	HFC-143a, HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof	

[a] For refrigeration equipment containing more than 50 pounds of refrigerant under these end-uses, see Table 4 for additional requirements.

(b) The following table lists prohibited substances as of their relevant dates:

Table 2: End-~~U~~use and Prohibited Substances.

General End-Use	Specific End-Use	Prohibited Substances	Effective Date
Refrigeration			
Cold storage warehouses ~~(new)~~	Cold storage warehouses (new)[a]	HFC-227ea, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-423A, R-424A, R-428A, R-434A, R-438A, R-507A, and RS-44 (2003 composition)	Prohibited as of January 1, 2023
Household refrigerators and freezers (new)	Compact residential consumer refrigeration products	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, and THR-03	Prohibited as of January 1, 2021

Household refrigerators and freezers (new)	Residential consumer refrigeration products	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, and THR-03	Prohibited as of January 1, 2022
Household refrigerators and freezers (new)	Built-in residential consumer refrigeration products	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, and THR-03	Prohibited as of January 1, 2023
~~Chillers~~			

~~Chillers~~	~~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), and THR-03~~	~~Prohibited as of January 1, 2024~~
~~Chillers~~	~~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, and THR-03~~	~~Prohibited as of January 1, 2024~~
Foam~~s~~ Systems Used to Manufacture			
Foams	Rigid polyurethane: slabstock and other	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6	Prohibited as of January 1, 2019
Foams	Rigid polyurethane: appliance foam	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6	Prohibited as of January 1, 2020

Foams	Rigid polyurethane: commercial refrigeration and sandwich panels	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6	Prohibited as of January 1, 2020
Foams	Polyolefin	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6	Prohibited as of January 1, 2020
Foams	Rigid polyurethane: marine floatation foam	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6	Prohibited as of January 1, 2020
Foams	Rigid polyurethane (PU): spray foam high-pressure two-component spray foam	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with 7 to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI	Prohibited as of January 1, 2020
Foams	Rigid polyurethane (PU): spray foam - one-component foam sealants	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with 7 to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI	Prohibited as of January 1, 2020

Foams	Polystyrene: extruded boardstock and billet (XPS)	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel B, and Formacel Z-6	Prohibited as of January 1, 2021
Foams	Rigid polyurethane (PU): ~~spray foam -~~ low-pressure two-component spray foam	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with 7 to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI	Prohibited as of January 1, 2021
Aerosols – Propellants			
Aer~~s~~osols - Propellants	Aer~~s~~osols - propellants	HFC-125, HFC-134a, HFC-227ea, and blends of HFC-227ea and HFC-134a	Prohibited as of January 1, 2019

[a] For the purposes of refrigeration equipment under this end-use containing more than 50 pounds of refrigerant, see Table 3 for additional requirements.

(c) The following table lists prohibited substances as of their relevant dates:

Table 3: End-use and Prohibited Substances.

General End-Use	**Specific End-Use**	**Prohibited Substances**	**Effective Date**
Air-conditioning Equipment, Stationary			
Air-conditioning Equipment	Room/wall/window air-conditioning equipment, PTACs, PTHPs, portable air-conditioning equipment, and residential dehumidifiers (new)	Refrigerants with a GWP of 750 or greater	Prohibited as of January 1, 2023

Air-conditioning Equipment	Other ~~A~~air-conditioning (new) equipment, residential and non-residential	Refrigerants with a GWP of 750 or greater	Prohibited as of January 1, ~~2023~~2025
Air-conditioning Equipment	Variable Refrigerant Flow (VRF) system (new)	Refrigerants with a GWP of 750 or greater	Prohibited as of January 1, 2026
Chillers - Air-conditioning, Industrial Process Refrigeration			
Chillers	Chillers (new) designed for ~~minimum~~ a chilled fluid leaving the evaporator at temperatures > +35 °F (2 °C)	Refrigerants with a GWP of 750 or greater	Prohibited as of January 1, 2024
Chillers - Industrial Process Refrigeration			
Chillers	Chillers (new) designed for ~~minimum~~ a chilled fluid leaving the evaporator at temperatures ≤ +35 °F (2 °C) and > -10 °F (-26 °C)	Refrigerants with a GWP of 1,500 or greater	Prohibited as of January 1, 2024
Chillers	Chillers (new) designed for ~~minimum~~ a chilled fluid leaving the evaporator at temperatures ≤ -10 °F (-26 °C) and > -58 °F (-50 °C)	Refrigerants with a GWP of 2,200 or greater	Prohibited as of January 1, 2024
Refrigeration Equipment, Stationary (in New Facilities)			
Cold Storage Warehouses	Refrigeration equipment (new), containing more than 50 pounds refrigerant	Refrigerants with a GWP of 150 or greater	Prohibited as of January 1, 2022
Ice Rinks	Refrigeration Equipment (new), containing more than 50 pounds refrigerant and Chillers (new)	Refrigerants with a GWP of 150 or greater	Prohibited as of January 1, 2024

Industrial Process Refrigeration excluding Chillers	Refrigeration equipment (new), containing more than 50 pounds refrigerant	Refrigerants with a GWP of 150 or greater	Prohibited as of January 1, 2022
Other Refrigeration	Refrigeration equipment (new), containing more than 50 pounds refrigerant	Refrigerants with a GWP of 150 or greater	Prohibited as of January 1, 2022
Refrigeration Equipment, Stationary (in Existing Facilities)			
Ice Rinks	Refrigeration Equipment (new), containing more than 50 pounds refrigerant and Chillers (new)	Refrigerants with a GWP of 750 or greater	Prohibited as of January 1, 2024
Industrial Process Refrigeration excluding Chillers	Refrigeration equipment (new), containing more than 50 pounds refrigerant	Refrigerants with a GWP of 2,200 or greater	Prohibited as of January 1, 2022

(d) The following table lists prohibited substances or requirements as of their relevant dates:

Table 4: End-use and-Prohibited Substances or Requirements.

General End-Use	**Specific End-Use**	**Prohibited Substances / Requirement**	**Effective Date**
Refrigeration Equipment, Stationary (in New Facilities)			
Retail Food Refrigeration	Refrigeration equipment (new), containing more than 50 pounds refrigerant	Refrigerants with a GWP of 150 or greater	Prohibited as of January 1, 2022

Refrigeration Equipment, Stationary (in Existing Facilities)			
Companies owning or operating 20 or more retail food facilities in California, and national supermarket chains operating in California	Refrigeration equipment containing more than 50 pounds refrigerant	Attain a company-wide weighted-average GWP of less than 2,500 or a 25% or greater reduction in GHGp below 2019 levels	~~January 1,~~ December 31, 2026
		Attain a company-wide weighted-average GWP of less than 1,400 or a 55% or greater reduction in GHGp below 2019 levels	January 1, 2030
Companies owning or operating fewer than 20 retail food facilities in California	Refrigeration equipment containing more than 50 pounds refrigerant	Attain a company-wide weighted-average GWP of less than 1,400 or a 55% or greater reduction in GHGp below 2019 levels	January 1, 2030

NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730.5, 39734, and 41511, Health and Safety Code. Reference: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734, and 41511, Health and Safety Code.

§ 95375. Requirements ~~Applicable to Table 1 of Section 95374(a).~~

(a) ~~*Prohibitions*~~ *Requirements Applicable to Table 1 of Section 95374(a)*.

(1) *Prohibitions*. No person ~~may~~shall sell, lease, rent, install, use, or otherwise enter into commerce, in the State of California, any refrigeration equipment or foam system manufactured after the effective date, that does not comply with Table 1, section 95374(a) of this subarticle.

~~(b)~~(2) *Exceptions*. The following exceptions apply to the list of prohibited substances or the effective dates for prohibited substances for ~~foam~~ end-uses identified in Table 1 of section 95374(a) of this subarticle:

~~(1)~~(A) *Foam End-Uses*. The effective date for all foam end-uses identified in Table 1 of section 95374(a) of this subarticle are extended to January 1, 2022, for military end-uses and January 1, 2025, for space- and aeronautics-related end-uses where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. For rigid polyurethane and polyisocyanurate laminated boardstock, polystyrene extruded sheet, and phenolic insulation board and bunstock, these same extensions include closed cell foam products and products containing closed cell foams manufactured with the applicable prohibited substances on or before these dates.

(B) *Very Low Temperature Refrigeration or Cooling Uses*. The prohibitions for refrigeration end-uses identified in Table 1 of section 95374(a) do not apply to refrigeration equipment used for Very Low Temperature Refrigeration or Cooling.

(C) *Refrigeration End-Uses*. Replacement of a refrigeration component in refrigeration equipment or system in an existing facility as part of the normal maintenance of refrigeration equipment; if the cumulative replacement of components within any three-year period does not exceed 50 percent of the capital cost of replacing the entire refrigeration equipment or system, excluding the cost of refrigerated display cases.

~~(c)~~(3) *Disclosure and Recordkeeping for Refrigeration End-Use Categories.* ~~The disclosure and recordkeeping requirements of this subarticle do not apply to any end-use category listed in Table 2 of section 95374(b) of this subarticle.~~

~~(1)~~(A) *Disclosure Statement*. As of the effective date of this subarticle, any person who manufactures motor-bearing new refrigeration equipment for sale or entry into commerce in the State of California, must provide a written disclosure to the buyer ~~as part of the sales transaction and invoice~~. The required written disclosure must state: “This equipment meets the regulatory requirements for hydrofluorocarbons as of the manufacturing date. Only those refrigerants ~~approved~~ allowable in the state for specific end uses may be used.”~~is prohibited from use in California with any refrigerants on the “List of Prohibited Substances” for that specific end-use, in accordance with California Code of Regulations, title 17, section 95374. This disclosure statement has been reviewed and approved by [THE COMPANY] and [THE COMPANY] attests, under penalty of perjury, that these statements are true and accurate.”~~

~~(2)~~(B) *Recordkeeping*. As of the effective date of this subarticle, any person who manufactures motor-bearing new refrigeration equipment for sale or entry into commerce in the State of California, must maintain for five years and make available, upon request by the California Air Resources Board's Executive Officer, a copy of the following records:

1.~~(A)~~ Name and address of the person purchasing the equipment at the time of purchase.

2.~~(B)~~ Telephone number and email address of the person purchasing the equipment at the time of purchase, if provided to the manufacturer.

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

4.~~(D)~~ Date of manufacture of the equipment.

5.~~(E)~~ Date of sale of the equipment.

6.~~(F)~~ The refrigerant type(s) the equipment is designed to use.

7.~~(G)~~ The refrigerant and full charge capacity of the equipment, where available.

8.~~(H)~~ A copy of the disclosure statement ~~issued~~made available to the ~~buyer~~person purchasing the equipment or recipient of the new refrigeration equipment.

(4~~d~~) *Recordkeeping for Foam End-Use Categories.*

(A) The recordkeeping requirements of this subarticle do not apply to any end-use category listed in Table 2 of section 95374(b) of this subarticle.~~(1) *Recordkeeping.*~~ As of the effective date of this subarticle, any person who manufactures a foam system in any end-use category listed in Table 1 of section 95374(a) of this subarticle for sale or entry into commerce in the State of California, must maintain for five years and make available, upon request by the California Air Resources Board's Executive Officer, a copy of the following records:

1.~~(A)~~ Name and address of the person purchasing the foam system at the time of purchase.

2.~~(B)~~ Telephone number and email address of the person purchasing the foam system at the time of purchase, if provided to the manufacturer.

3.~~(C)~~ The type of foam end-use category.

4.~~(D)~~ Date of manufacture of the foam system.

5.~~(E)~~ Date of sale of the foam system.

6.~~(F)~~ The blowing agent used in the foam system.

(B) Foam end-uses that no longer use any prohibited substance listed in section 95374(a) may provide the California Air Resources Board with an attestation under penalty of perjury that the end-use does not use a prohibited substance and this shall serve as compliance with section 95375(a)(4). All attestations shall be sent in accordance with section 9537~~8~~7(c)~~(3).~~

~~NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39607, 39730.5, 39734 and 41511, Health and Safety Code. Reference: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734 and 41511, Health and Safety Code.~~

~~§ 95376. Requirements Applicable to Table 2 of Section 95374(b).~~

~~(a)~~(b) ~~*Prohibitions*~~*Requirements Applicable to Table 2 of Section 95374(b)*.

(1) *Prohibitions*. No person ~~may~~ shall ~~offer any equipment or product for sale~~,sell, lease, rent, install, use, or otherwise ~~cause any equipment or product manufactured after the effective date, to~~ enter into commerce in the State of California, ~~if that equipment or product uses or will use a substitute in a manner inconsistent with~~ any ~~substitute in~~ end-use equipment or product manufactured after the effective date, ~~s~~ that does not comply with the requirements of ~~listed in~~ Table 2 of section 95374(b) of this subarticle.

~~(b)~~(2) *Exceptions*. The following exceptions apply to the list of prohibited substances or the effective dates for prohibited substances for end-uses identified in Table 2 of section 95374(b) of this subarticle:

~~(1)~~(A) *Foam End-Uses*. Except where specified below, the effective date for foam end-uses identified in Table 2 of section 95374(b) of this subarticle are extended to January 1, 2022, for military applications and January 1, 2025, for 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, including closed cell foam products and products

containing closed cell foams manufactured with the applicable prohibited substances on or before these dates.

1.~~(A)~~ *Polystyrene: Extruded Boardstock and Billet*: The prohibited substances for polystyrene extruded boardstock and billet are acceptable for use in this specific end-use from January 1, 2021, until January 1, 2022, in military applications and until January 1, 2025, for 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. Closed cell foam products and products containing closed cell foams manufactured with the prohibited substances for polystyrene extruded boardstock and billet on or before January 1, 2022, for military applications or on or before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.

2.~~(B)~~ Rigid Polyurethane: Spray Foam - High-Pressure Two-Component ("High-Pressure RP"): The prohibited substances for High-Pressure RP are acceptable for use in High-Pressure RP from January 1, 2020, until January 1, 2025, only in 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. Closed cell foam products and products containing closed cell foams manufactured with the prohibited substances for High-Pressure RP on or before January 1, 2025, may be used after that date.

3.~~(C)~~ *Rigid Polyurethane: Spray Foam - Low-Pressure Two-Component ("Low-Pressure RP")*: The prohibited substances for Low-Pressure RP are acceptable for use in Low Pressure RP from January 1, 2021, until January 1, 2025, only in 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. Low pressure two-component spray foam kits manufactured with the prohibited substances for Low-Pressure RP on or before January 1, 2025, for military or space– and aeronautics-related applications may be used after that date.

~~*(2) Chillers End-Uses*. New centrifugal chillers and new positive displacement chillers are allowed to use HFC-134a for military marine vessels and allowed to use R-404A and HFC-134a for 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.~~

~~(3)~~(B) *Aerosols - Propellants End-Uses*. Unless otherwise prohibited by State regulation, HFC-134a is allowed in the following aerosol propellant specific uses:

1.~~(A)~~ Cleaning products for removal of grease, flux and other soils from electrical equipment or electronics;

2.~~(B)~~ Refrigerant flushes;

3.~~(C)~~ Products for sensitivity testing of smoke detectors;

4.~~(D)~~ Sprays containing corrosion preventive compounds used in the maintenance of aircraft, electrical equipment or electronics, or military equipment;

5.~~(E)~~ Duster sprays specifically for removal of dust from photographic negatives, semiconductor chips, and specimens under electron microscopes, and energized electrical equipment;

6.~~(F)~~ Adhesives and sealants in large canisters;

7.~~(G)~~ Lubricants and freeze sprays for electrical equipment or electronics;

8.~~(H)~~ Sprays for aircraft maintenance;

9.~~(I)~~ Pesticides for use near electrical wires or in aircraft, in total release insecticide foggers, or in certified organic use pesticides for which the U.S. EPA has specifically disallowed all other lower-global warming potential (GWP) propellants;

10.~~(J)~~ Mold release agents and mold cleaners;

11.~~(K)~~ Lubricants and cleaners for spinnerettes for synthetic fabrics;

12.~~(L)~~ Document preservation sprays;

13.~~(M)~~ Metered dose inhalers (MDIs) approved by the U.S. Food and Drug Administration (FDA) for medical purposes;

14.~~(N)~~ Wound care sprays;

15.~~(O)~~ Topical coolant sprays for pain relief; ~~and~~

16.~~(P)~~ Products for removing bandage adhesives from skin~~.~~; and

17. Bear spray.

(C) *Aerosols - Propellants End-Uses*. HFC-227ea and blends of HFC-227ea and HFC-134a are allowed in metered dose inhalers (MDIs) approved by the U.S. Food and Drug Administration (FDA) for medical purposes.

~~NOTE: Authority cited: Section 39734, Health and Safety Code. Reference: Section 39734, Health and Safety Code.~~

(c) *Requirements Applicable to Table 3 of Section 95374(c)*.

(1) *Prohibitions*. No person shall sell, lease, rent, install, use, or enter into commerce in the State of California, any end-use equipment or product manufactured after the effective date, that does not comply with Table 3 of section 95374(c) of this subarticle.

(2) *Exceptions*. The following exceptions apply to the list of prohibited substances or the effective dates for prohibited substances for end-uses identified in Table 3 of section 95374(c) of this subarticle:

(A) *Chillers End-Uses*. New centrifugal chillers and new positive displacement chillers are allowed to use HFC-134a for military marine vessels and allowed to use R-404A and HFC-134a for 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.

(B) *Refrigeration equipment with 50 Pounds or Less of Refrigerant*. The prohibitions in Table 3, section 95374(c), do not apply to any refrigeration, cold storage, industrial process refrigeration, and all non-residential refrigeration not otherwise categorized as retail food, cold storage, or industrial process refrigeration that contain 50 pounds or less of refrigerant.

(C) *Very Low Temperature Refrigeration or Cooling*: The prohibitions in Table 3, section 95374(c), do not apply to any end-uses used for Very Low Temperature Refrigeration or Cooling.

(D) *Approved Building Permits*: The prohibitions in Table 3, section 95374(c), do not apply to any facility with new refrigeration equipment that received an approved building permit before the effective date.

(3) *Reclaimed Refrigerant Use Requirements.* Manufacturers of AC and VRF equipment subject to effective dates of January 1, 2025 and January 1, 2026 respectively, in Table 3 shall comply with requirements listed under section 95376.

(4) Labeling *and Recordkeeping.*

(A) *Labeling*. As of the effective date of this subarticle, any person who manufactures any end-use category identified in Table 3 of section 95374(c) shall display a label on the equipment that clearly and visibly indicates:

1. The type of refrigerant;

2. Where available, the refrigerant charge size in ounces, pounds, or kilograms;

3. The date of manufacture, indicating at a minimum, the four digit year of manufacture in standard format; and

4. Existing labels meeting the above requirements may be used. For built-up systems, existing equipment component labels may be used.

(B) *Recordkeeping for Manufacturers*. As of the effective date of this subarticle, any person who manufactures any equipment listed in Table 3 of section 95374 (c) of this subarticle, for sale or entry into commerce in the State of California, shall maintain for five years and make available, upon request by the California Air Resources Board's Executive Officer or a local Air Pollution Control Officer, a copy of the following records:

1. Name and address of the person purchasing the equipment at the time of purchase;

2. Telephone number and email address of the person purchasing the equipment at the time of purchase, if provided to the manufacturer;

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

4. Date of manufacture of the equipment;

5. Date of sale of the equipment;

6. The refrigerant type(s) the equipment is designed to use; and

7. The refrigerant and full charge capacity of the equipment, where available.

(d) *Requirements Applicable to Table 4 of Section 95374(d).*

(1) *Prohibitions for Refrigeration Equipment, Stationary (in New Facilities)*. No person shall sell, lease, rent, install, use, or enter into commerce in the State of California, any end-use equipment or product manufactured after the effective date, that does not comply with Table 4 of section 95374(d) of this subarticle.

(2) *Labeling and Recordkeeping Requirements for Manufacturers.*

(A) *Labeling for Manufacturers*. As of the effective date of this subarticle, any person who manufactures any equipment in end-use category identified in Table 4 of section 95374(d) shall display a label on the equipment that clearly and visibly indicates:

1. The type of refrigerant;

2. Where available, the refrigerant charge size in ounces, pounds, or kilograms;

3. The date of manufacture, indicating at a minimum, the four digit year of manufacture in standard format; and

4. Existing labels meeting the above requirements may be used. For built-up systems, existing equipment component labels may be used.

(B) *Recordkeeping for Manufacturers*. As of the effective date of this subarticle, any person who manufactures any equipment listed in Table 4 of section 95374 (d) of this subarticle, for sale or entry into commerce in the State of California, shall maintain for five years and make available, upon request by the California Air Resources Board's Executive Officer or a local Air Pollution Control Officer, a copy of the following records:

1. Name and address of the person purchasing the equipment at the time of purchase;

2. Telephone number and email address of the person purchasing the equipment at the time of purchase, if provided to the manufacturer;

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

4. Date of manufacture of the equipment;

5. Date of sale of the equipment;

6. The refrigerant type(s) the equipment is designed to use; and

7. The refrigerant and full charge capacity of the equipment, where available.

(3) *Exceptions*. The following exceptions apply to the effective dates for prohibited substances for end-uses identified in Table 4 of section 95374(d) of this subarticle:

(A) Facilities with new refrigeration equipment with approved building permit applications before the effective date.

(B) *Refrigeration equipment with 50 Pounds or Less of Refrigerant*. The prohibitions in Table 4, section 95374(d), do not apply to any refrigeration equipment that contain 50 pounds or less of refrigerant.

(4) *Requirements for Refrigeration Equipment, Stationary (in Existing Facilities).* The following requirement shall apply:

(A) ~~*January 1*~~*December 31, 2026 Requirements*. Companies that own or operate 20 or more retail food facilities in California and companies that are defined in this regulation as "national supermarket chains" shall comply with one of the following requirements by ~~January 1~~December 31, 2026:

1. The weighted-average GWP shall be less than 2,500 for the aggregated total of all refrigerant in all refrigeration systems greater than 50 pounds; or

2. GHGp of all refrigerant in all refrigeration systems greater than 50 pounds shall be reduced by 25 percent or more of their 2019 baseline GHGp.

(B) *January 1, 2030 Requirements*. Companies that own or operate one or more retail food facilities in California shall comply with one of the following requirements by January 1, 2030:

1. The weighted-average GWP shall be less than 1,400 for the aggregated total of all refrigeration systems greater than 50 pounds; or

2. The GHGp of all refrigerant in all refrigeration systems greater than 50 pounds shall be reduced by 55 percent or more of their 2019 baseline GHGp.

(5) *Registration Requirements for Companies with Retail Food Facilities.* On or before January 1, 2022, retail food facilities shall register the following information in the R3 database:

(A) Refrigeration systems containing more than 50 pounds of refrigerant that use a GWP less than 150, including:

1. System identification number (assigned by the facility owner or operator);

2. System type;

3. System manufacturer;

4. System model or description;

5. System model year;

6. System serial number. The serial number(s) of the affected system or component must be recorded when present and accessible. When the affected system or component is part of an assembly without a serial number or does not have an individual serial number or is not accessible after assembly, the physical location of the affected system must be recorded in enough detail to permit positive identification;

7. Physical location of the refrigeration system through schematic or floor plan with system locations clearly noted;

8. Temperature classification – The refrigeration system must be identified as a low temperature system, a medium temperature system, or other;

9. Full charge of the refrigeration system; and

10. Type of refrigerant(s) used.

(B) When a refrigeration system full charge size decreases to 50 pounds or less after a refrigerant retrofit or charge reduction, the exact amount of charge reduced must be reported.

(C) All retail food facilities owned by the company that are located in California.

(D) All registered information required in sections 95375(3) shall be updated by January 1 of the year after the information has changed.

(6) *Reporting Requirements for Companies with Retail Food Facilities.* On or before March 1, 2022, and each year thereafter by March 1, all companies with a retail food facility shall report into the R3 database for the prior calendar year with the following information:

(A) Name of Company;

(B) Company Federal Tax Identification Number;

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

(D) Company location address including a street address, city, state, and zip code;

(E) Company contact person;

(F) Company contact person phone number;

(G) Company contact person e-mail address; and

(H) Compliance Information:

1. The company's weighted-average GWP; and

2. The company's GHGp.

(7) *Recordkeeping Requirements for Companies with Retail Food Facilities.* As of the effective date of this subarticle, any person who owns or operates a retail food facility shall maintain for five years and make available, upon request by the California Air Resources Board's Executive Officer or a local Air Pollution Control Officer, the following records or documentation that shows the following information:

(A) The means by which the full charge was determined, both before and after either a refrigerant retrofit or charge reduction;

(B) Each refrigeration system refrigerant retrofit, including the full charge and type of refrigerant used in the system before a retrofit and after a retrofit;

(C) Each refrigeration system charge reduction, including the full charge size before a refrigerant charge reduction and after a refrigerant charge reduction;

(D) Refrigeration system retirement, including date of removal of the refrigeration system from the facility;

(E) Amount and type of refrigerant removed from the refrigeration system and where the refrigerant was stored and/or sent afterwards, either after a system retirement, system refrigerant retrofit, or a system charge reduction;

(F) The calculations and spreadsheets used to create the reported information under section 95375(d)(4); and

(G)The recordkeeping requirements of section 95375(d)(7) shall include documentation including but not limited to, invoices, receipts, records of

shipments, plans, or work details, that are generated or supported by information from a third party, such as a service technician or refrigerant reclaimer.

NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39607, 39730.5, 39734, and 41511, Health and Safety Code. Reference: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734, and 41511, Health and Safety Code.

§ 95376. *Refrigerant Recovery, Reclaim, and Reuse Requirements (R4 Program).*

(a) *Reclaimed Refrigerant Use Requirements for Manufacturers of AC Equipment Subject to Effective Date of January 1, 2025 in Table 3.* Equipment manufacturers shall determine the number of pounds of certified reclaimed R-410A refrigerant use required as follows:

(1) Use the following equation to determine baseline average pounds per year:

Baseline Average Pounds of Refrigerant in 2018 and 2019 = [(pounds in AC equipment entered into California in 2018 + pounds in AC equipment entered into California in 2019) ÷ 2].

(2) Applying the calculated baseline average pounds, determine the number of pounds of certified reclaimed R-410A refrigerant use required annually, using the following equation:

Annual Reclaim Use Requirement for 2023 = [(10% × baseline average pounds calculated in (a)(1)) × 1.04 (a one-time growth factor of 4%)].

Annual Reclaim Use Requirement for 2024 = [(10% × baseline average pounds calculated in (a)(1)) × 1.04 (a one-time growth factor of 4%)].

(3) For AC manufacturers with no shipments into California in 2018 and 2019, the baseline years shall be 2023 and 2024. Projected shipments into California shall be used to calculate the certified reclaimed refrigerant requirements for the initial baseline report and first annual report, while actual shipments into California will be used for the final annual report. The following equation shall be used to determine the number of pounds of certified reclaimed R-410A refrigerant use requirement:

Annual Reclaim Use Requirement for 2023 and 2024: (10% × pounds in AC equipment entered into California per year).

(4) The requirement shall be met by AC manufacturers by any or all of the following:

(A) Certified reclaimed R-410A refrigerant purchased and used in new equipment.

(B) Certified reclaimed R-410A refrigerant purchased and used in the servicing of existing equipment.

(C) Optional Early Action Credit: Refrigerant with a GWP less than 750 used in new equipment entered into commerce in California prior to January 1, 2025.

(5) The requirement to purchase and use certified reclaimed R-410A refrigerant shall be met before July 1, 2025.

(b) *Reclaimed Refrigerant Use Requirements for Manufacturers of VRF Equipment Subject to Effective Date of January 1, 2026 in Table 3*. VRF manufacturers shall determine the number of pounds of certified reclaimed R-410A refrigerant use required as follows:

(1) Use the following equation to determine baseline average pounds per year:

[(pounds in VRF equipment entered into California in 2018 + pounds in VRF equipment entered into California in 2019) ÷ 2].

(2) Applying the calculated baseline average pounds per year, determine the number of pounds of certified reclaimed R-410A refrigerant use required annually, using the following equations:

Annual Reclaim Use Requirement for 2023: [(15% × average pounds per year calculated in (b)(1)) × 1.10 (a one-time growth factor of 10%)].

Annual Reclaim Use Requirement for 2024: [(15% × average pounds per year calculated in (b)(1)) × 1.10 (a one-time growth factor of 10%)].

Annual Reclaim Use Requirement for 2025: [(25% × average pounds per year calculated in (b)(1)) × 1.10 (a one-time growth factor of 10%)].

(3) For VRF manufacturers with no shipments into California in 2018 and 2019, the baseline years shall be 2023, 2024, and 2025. Projected shipments into California shall be used to calculate the certified reclaimed refrigerant requirements for the initial baseline report and first annual report, while actual shipments into California will be used for the subsequent annual reports. The following equation shall be used to determine the number of pounds of certified reclaimed R-410A refrigerant requirement:

Annual Reclaim Use Requirement for 2023 and 2024: (15% × pounds in VRF equipment entered into California per year).

Annual Reclaim Use Requirement for 2025: (25% × pounds in VRF equipment entered into California in 2025).

(4) The requirement shall be met by VRF manufacturers by any or all of the following:

(A) Certified reclaimed R-410A refrigerant purchased and used in new equipment.

(B) Certified reclaimed R-410A refrigerant purchased by the VRF manufacturer and used in the servicing of existing equipment.

(C) *Optional Early Action Credit*: Refrigerant with a GWP less than 750 used in new VRF equipment entered into commerce in California prior to January 1, 2026.

(5) The requirement to purchase and use certified reclaimed R-410A refrigerant shall be met before July 1, 2026.

(c) *Reporting Requirements for AC and VRF Manufacturers*.

(1) *Initial Baseline Report*. An Initial Baseline Report with self-certification shall be submitted by July 1, 2023 and must include:

(A) For AC Manufacturers:

(i) With AC shipments into California in 2018 and 2019: The type and quantity (pounds) of refrigerant used with a GWP of 750 or greater for equipment manufactured in 2018 and 2019 for use in California; and the quantity (pounds) of certified reclaimed R-410A refrigerant required, as calculated using the equations in section 95376(a)(1) and 95376(a)(2).

(ii) With no AC shipments equipment into California in 2018 and 2019: The projected type and quantity (pounds) of refrigerant used with a GWP of 750 or greater for equipment manufactured in 2023 and 2024 for use in California; and the quantity (pounds) of certified reclaimed R-410A refrigerant required, as calculated using the equation in section 95376(a)(3).

(B) For VRF Manufacturers:

(i) With VRF shipments into California in 2018 and 2019: The type and quantity (pounds) of refrigerant used with a GWP of 750 or greater for equipment manufactured in 2018 and 2019 for use in California; and the quantity (pounds) of certified reclaimed R-410A refrigerant required, as calculated using the equations in section 95376(b)(1) and 95376(b)(2).

(ii) With no VRF shipments into California in 2018 and 2019: The projected type and quantity (pounds) of refrigerant used with a GWP of 750 or greater for equipment manufactured in 2023, 2024 and 2025 for use in California; and the quantity (pounds) of certified reclaimed R-410A refrigerant required, as calculated using the equations in section 95376(b)(3).

(2) *Annual and Final Reports*. AC and VRF manufacturers shall submit annual reports with self-certification as follows:

(A) For AC manufacturers, an annual report is due July 1, 2024, and a final annual report is due July 1, 2025.

(B) For VRF manufacturers, annual reports are due July 1, 2024 and July 1, 2025. A final annual report is due July 1, 2026.

(C) For AC and VRF manufacturers, annual and final reports must include the following:

1. Type and quantity (pounds) of certified reclaimed R-410A refrigerant used in factory for new equipment manufactured;

2. Type and quantity (pounds) of certified reclaimed R-410A refrigerant used in field for charging new equipment or servicing existing equipment;

3. Type and quantity (pounds) of refrigerant with a GWP less than 750 used in new AC equipment and/or new VRF equipment entered into commerce in California;

4. Number and types of equipment entered into commerce in California containing refrigerant with a GWP less than 750 prior to January 1, 2025 for ACs, and prior to January 1, 2026 for VRFs;

5. Names and addresses of U.S. EPA-certified reclaimers and the quantity (pounds) of certified reclaimed R-410A refrigerant purchased and used from each entity; and

6. An attestation, certifying under penalty of perjury, signed and dated by a responsible official with authority, that under the R4 Program, the certified reclaimed refrigerant is not being purchased, used, or counted to comply with any other government requirement(s), private or voluntary program(s), or any other credit(s) or incentive(s).

(3) All required reports must be submitted electronically.

(d) *Record-keeping Requirements For AC and VRF Manufacturers*. As of the effective date of this subarticle, any person who manufactures equipment subject to the R4 Program requirements for sale or entry into commerce in the State of California, must maintain for five years and make available, upon request by the California Air Resources Board's Executive Officer, a copy of the following records:

(1) All reportable information required by section 95376(c);

(2) Number and types of equipment distributed containing certified reclaimed R-410A refrigerant;

(3) Name and addresses (where available) of distributors or servicing companies to which equipment manufacturers sold or distributed reclaimed refrigerant; and

(4) Additional substantiating documentation such as receipts, purchase orders, contracts or agreements.

NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39607, 39730.5, 39734, and 41511, Health and Safety Code. Reference: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734, and 41511, Health and Safety Code.

§ 9537~~7~~~~6~~. Enforcement.

(a) Failure to comply with any ~~applicable~~ requirement of this subarticle constitutes a separate violation of this subarticle, including but not limited to failure to retain or produce any records.

(b) Submitting or producing inaccurate information or record(s) that are required to be submitted or retained by this subarticle constitutes a separate violation of this subarticle.

(c) Falsifying any information or record required to be submitted or retained by this subarticle constitutes a separate violation of this subarticle.

(d) ~~Excepting sections 95374(b) and 95376, v~~Violations of this subarticle, including violations of any condition imposed pursuant to section 9537~~8~~7, are subject to penalties under the Health and Safety Code section 38580.

~~(e) Violations of sections 95374(b) and 95376 are subject to penalties set forth in Article 3 (commencing with Section 42400) of Chapter 4 of Part 4 of the Health and Safety Code.~~

(f~~e~~) Any violation of this subarticle may be enjoined pursuant to the Health and Safety Code section 41513.

(f) Enforcement of this subarticle may be carried out by authorized representatives of the Executive Officer or a local Air Pollution Control Officer.

NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730.5, 39734, and 41511, Health and Safety Code. Reference: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734, and 41511, Health and Safety Code.

§ 9537~~8~~7. Variance.

(a) *Applicability*. An Applicant may submit a request to the Executive Officer for a variance from the requirements of section 95374 and 95375. The Executive Officer may grant a variance if the Executive Officer determines that the Applicant has proven by clear and convincing evidence that the criteria for each variance type in section 9537~~8~~7(b) has been met and that the Applicant has complied with all application requirements specified in subsection 9537~~8~~7(c).

(b) *Variance Types*. The Executive Officer may issue the following variances:

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

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

(B) An exemption will not increase the overall risk to human health or the environment; and

(C) The Applicant has used best efforts to anticipate and address the impossibility and any potential noncompliance.

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

(A) Non-compliance is due to a Force Majeure event; and

(B) The Applicant has used best efforts to anticipate and address any force majeure event and any potential noncompliance, including minimizing any adverse effects of the noncompliance.

(c) *Application for Variance*. To apply for a variance the Applicant shall submit an Application in accordance with the following requirements:

(1) The Application shall include:

(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) from which a variance is being requested;

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

(F) Identify whether the variance requested is pursuant to section 95378~~7~~ (b)(1), 95378~~7~~ (b)(2), or both; and provide the following:

1. Clear and convincing evidence demonstrating how the variance criteria specified in section 95378~~7~~ (b) has been met; and

2. Rationale with supporting documentation for attributing non-compliance to Impossibility or a Force Majeure;

(G) A description of all efforts made to expeditiously fulfill the requirements of the section(s) from which a variance is being requested;

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

(I) A compliance plan which describes in detail how, if a variance is granted, compliance will be achieved as expeditiously as possible including (i) the method by which compliance will be achieved, (ii) milestone dates, and (iii) milestone achievements;

(J) A description of the damage or harm that will result to the Applicant from immediate compliance with the regulatory requirements, including if compliance

would result in an extraordinary economic hardship, such as closure of the entire facility or loss of a large portion of the revenue.

(K) Excepting section 95378~~7~~ (b)(2), quantification of current GHG emissions resulting from normal business-as-usual operations as it directly relates to the continued use of any substance in end-uses listed in Table 1, section 95374(a); Table 2, section 95374(b); Table 3, section 95374(c); or Table 4, section 95374(d). This includes quantification of the direct GHG emissions resulting from refrigerant leaks or HFC emissions and indirect GHG emissions resulting from energy use (where applicable), with all calculations, based on the average lifetime of the equipment or product that will continue to use prohibited substances. Applicant must include all calculations used to calculate GHG emissions estimates and use CARB approved emission factors;

(L) A description of any negative impacts to human health or the environment that may result from the granting of a variance;

(M) A mitigation plan that demonstrates how the Applicant will reduce excess GHG emissions to a level equal to or below what would have been emitted had the Applicant been in compliance and how the applicant will mitigate any negative impacts to human health or the environment. Applicant must include all calculations used to calculate GHG emission estimates and use CARB approved emissions factors. This may include an analysis of options to minimize usage of prohibited substances, efforts to reduce leaks or venting of prohibited substances, and options to recycle or destroy high-GWP refrigerant(s); and

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

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

(3) All applications and documentation relating to the variance shall be submitted to CARB at the following email address:

HFCREDUCTION@ARB.CA.GOV

(4) Applications may be submitted to the following address:

CALIFORNIA AIR RESOURCES BOARD

CHIEF, RESEARCH DIVISION

1001 I STREET

SACRAMENTO, CA 95814

(5) Verbal submissions do not constitute acceptable application formats.

(6) Applications and supporting documents shall be written in the English language.

(7) Any Applicant submitting information to the Executive Officer pursuant to this subarticle may claim such information as “confidential” by clearly identifying such information as “confidential.” Any claim of confidentiality by an Applicant submitting information must be based on the Applicant’s belief that the information marked as confidential is either trade secret or otherwise exempt from public disclosure under the California Public Records Act (Government Code, section 6250 et seq.). All such requests for confidentiality shall be handled in accordance with the procedures specified in California Code of Regulations, title 17, sections 91000 to 91022.

(d) Approval and Disapproval Process.

(1) The Executive Officer will determine whether the application is complete and will notify the Applicant of this determination within 30 days of receipt of an application. If the application is determined to be incomplete, the Executive Officer will notify the Applicant and specify the information needed to make the application complete. To be complete, the Applicant must provide all information identified in section 95378~~7~~, subsections (b) and (c). The application will not be deemed complete until all information in section 95378~~7~~ subsections (b) and (c) is submitted. Any application not providing all required information within 90 calendar days, is automatically denied.

(2) Within 30 calendar days after the application is deemed completed, the Executive Officer will publicly post notice of receipt of the application, and the requested variance, and invite public comment for 30 calendar days from the date the notice is posted.

(A) Public comments that are received within 30 calendar days of the date such information is made available shall be considered by the Executive Officer in making the final decision on the application. The Applicant may also on his or her own initiative submit additional supporting documentation before a decision has been reached.

(B) The Executive Officer will determine if the variance application is approved or disapproved within 60 calendar days after close of the public comment period.

(3) The Executive Officer will notify the Applicant of the decision in writing, and if approved, will specify any and all terms and conditions of the variance in the form of an Executive Order.

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

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

(6) The Executive Officer may expeditiously approve a variance application for a force majeure event meeting the criteria specified in section 95378~~7~~ (b)(2) prior to the close of a public comment period if the Executive Officer determines the urgency of the force majeure event necessitates an immediate variance to protect human health or the environment.

(e) Failure to Comply with Terms or Conditions of the Executive Order.

(1) The Applicant shall comply with all terms of the Executive Order.

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

(f) Revocation or Modification of Variance.

(1) If the Executive Officer determines that the Applicant no longer meets the variance criteria specified in subsection (b) of this section, the Executive Officer may revoke or modify the Executive Order.

(2) If the Executive Officer determines that the Applicant violates any requirement of the Executive Order, the Executive Officer may revoke or modify the Executive Order.

(g) Review of Agency Decision.

(1) An Applicant may petition for review of the Executive Officer's decision by requesting an administrative hearing in accordance with the procedures specified in title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 1.25, Article 2 (commencing with section 60055.1).

(2) An Applicant adversely affected by the final decision of the administrative hearing may seek judicial review by filing a petition for writ of mandate in accordance with section 1094.5 of the California Code of Civil Procedure within 30 days after the order or decision becomes final.

NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 38597, 39515, 39516, 39600, 39601, 39605, 39730.5, 39734 and 41511, Health and Safety Code; Section 1094.5 of the California Code of Civil Procedure. Reference: Sections

38510, 38598, 38560, 38562, 38566, 38580, 38597, 39515, 39516, 39600, 39601, 39605, 39730, 39730.5, 39734 and 41511, Health and Safety Code; Section 1094.5 of the California Code of Civil Procedure; Mathews v. Eldridge (1976) 424 U.S. 319.

§ 9537~~9~~8. Severability.

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

NOTE: Authority cited: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730.5, 39734, and 41511, Health and Safety Code. Reference: Sections 38510, 38598, 38560, 38562, 38566, 38580, 39600, 39601, 39730, 39730.5, 39734, and 41511, Health and Safety Code.